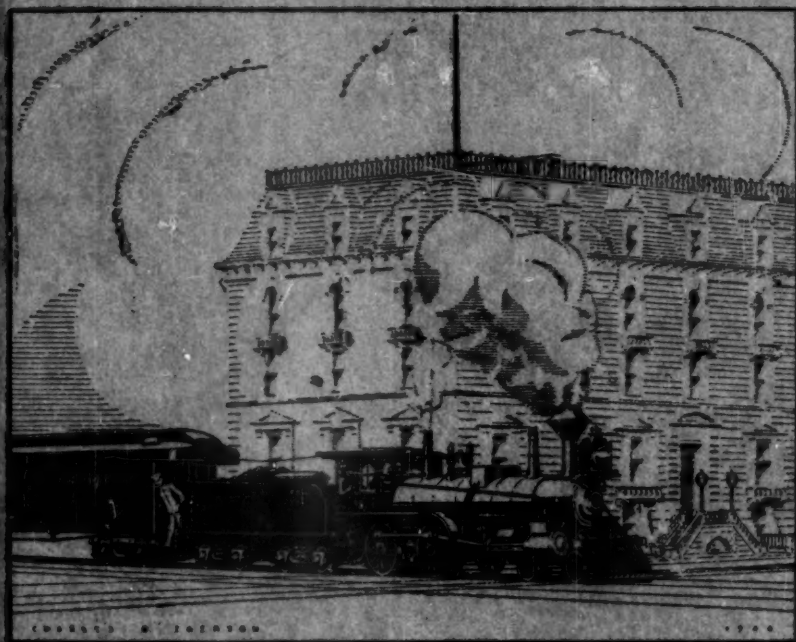


BULLETIN

No. 69



THE RAILWAY AND LOCOMOTIVE HISTORICAL SOCIETY

WHISTLER'S RAILROAD

The Western Railroad of Massachusetts

BULLETIN No. 69

By CHAS. E. FISHER

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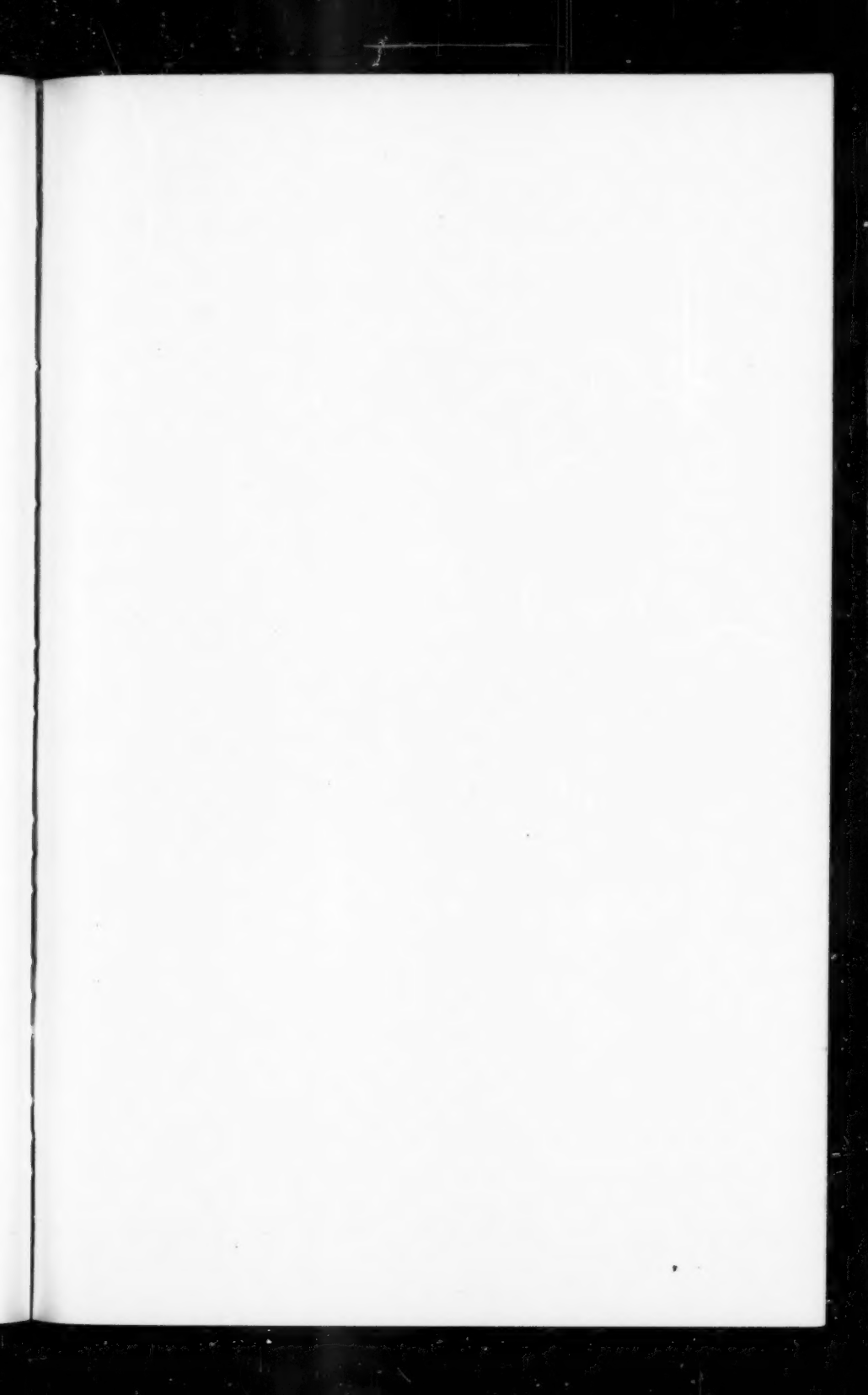
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Long before Pearl Harbor, your Editor started on this history by taking notes from the material now in the Baker Library. During the time that has elapsed, the work has been continued only as conditions have permitted—an unsatisfactory method and for this reason the continuity is not what it should be. It has been an interesting task, however, for the road has always played an important part in our New England railroad history.

In preparing this history, there are certain facts that stand out that we might well consider today. The first is the matter of state aid. Without the help of the State of Massachusetts, this railroad certainly would not have been completed at that time. It was fitting that the state should aid this enterprise. However, it was wise enough to insist that a certain number of state legislators should be directors of this enterprise and this number was increased as the sums of money were increased. When the loan was paid, as it was paid in full, these representatives of the state withdrew from the board of directors. That these two groups worked in harmony, the records testify—the directors *directed* this railroad, without doubt or question. The action of the state of Massachusetts was likened to that of some of our eastern states—Maryland was and has always been interested in the Baltimore & Ohio

R. R., but some of our mid-western states made a sorry spectacle of their public improvements by lack of foresight on their part. And even today, one wonders at the huge sums spent by both our federal and state governments if the interests of the tax payers have received proper attention. Here is something that is well worth our study from the sums involved.

The second relates to the consolidation with the Boston & Worcester R. R. to form the present Boston & Albany R. R. That the consolidation was inevitable, none can deny, in fact it was the intention from the outset to have only one railroad, yet for the entire life of this road, save for one short period, it was spent in constant bickering over the division of rates to the detriment of the shipping public and everyone else concerned. Even tho' the Boston & Worcester stockholders finally saw the advantages of such a consolidation, their directors flouted their wishes and held out for their own terms. How they kept their offices is one of the marvels of railroad history. However, when the protective clause in their charter expired and the Western R. R. threatened to construct its own line into Boston, then and only then did these directors recede from their position and the long awaited consolidation take place.

I wonder if we don't face a similar situation today. That there must be a consolidation of some or all of our railroads or else a more closely working union between these carriers, no one can deny. The attitude of some of our carriers is like that of the Boston & Worcester—they think they have a pretty good road and they'll consolidate only upon their terms. Right in New England, one of our largest manufacturing cities, in order to reach the metropolis depends upon the service of two railroads. In the past thirty years, one railroad has maintained about the same running time while on the other, it is actually slower, tho' this road has faster trains between this junction point and the metropolis than these through trains. At a meeting in which the passenger representatives of both roads were present, these conditions were pointed out and the city, frankly asked these railroad officials what could be done about it. Individually, neither one could solve the problem, together, it was possible. But for some unknown reason, the road that enters the metropolis gave a few lame excuses, could see nothing out of line and the affair, for the present, has bogged down with service at a slower running time than thirty years ago!

To my mind, there is no excuse for this—it shows a true lack of perspective and selfish motives on the part of some officials. Other roads have worked together, with good results, in a similar situation. Furthermore, if these two roads were consolidated, it would be the problem of this consolidation, not the problem of one, depending upon the actions of a connecting carrier. In this instance, there probably will be no abandonment of line but it is from instances like these that causes some abandonments. The answer to this particular problem will be that these subsidised carriers, the airplane and truck will take the business of this manufacturing city and both roads will be the losers. To

me, the future holds this prospect—if our railroads either won't work together to serve these community interests or they won't consolidate upon terms that are fair and equitable, then our government may consolidate them upon terms which may not be to their liking for, until man has learned to live at peace with his neighbor, our railroads are vital to the war effort and other modes of transportation will continue to sap their strength unless there is eternal vigilance and a willingness to serve displayed by their officials.

And lastly, whether the old Western R. R. is ever abandoned in order that a connecting link may be built to use the Hoosac tunnel, the road will always serve as a monument and a tribute to the engineering skill of George Washington Whistler. True to his profession as an engineer, he examined all of the routes in that difficult and mountainous western section of this state, until he located what he believed was the best and had the easiest grades and his wisdom has been fully verified in all these years. It is upon these early pathfinders, men true to their profession, many of whom now are forgotten, that depends the success of an enterprise.

The Western Railroad

BY CHAS. E. FISHER

Chapter I

INTRODUCTION

This is the story of a railroad, not a large railroad as railroads go—about 150 miles in length, but a mighty important enterprise in its day in that it was the first trunk-line railroad built in America.

The completion of the Erie canal across the state of New York was the impetus that gave the city of that name its early start. Philadelphia and Baltimore were both deeply concerned lest they be overshadowed, as well they might be. Boston also shared that same concern. All realized that they must have some means of transportation to reach the vast mid-west. The Commonwealth of Pennsylvania built its canals and railroads to reach Pittsburgh and the citizens of Baltimore have always regarded the Baltimore & Ohio R. R. with personal pride.

New England, hedged in by mountains and washed by the Atlantic presented a difficult problem. A canal was proposed across the state and into New York State to the Hudson River. It was just at the time when the "iron horse" was demonstrating its value as a prime mover in England but no one believed it capable of ascending the Berkshires with anything like a paying load. The idea persisted, gained ground and, as we shall see, was completed. Why was it America's first trunk-line railroad? It differed in this wise. Practically all roads constructed or in the process of construction were between two large cities or towns with no thought other than to carry the business that arose between the two. Although no one denies that the Baltimore & Ohio R. R. was not trunk-line in character, still, at the time the Western R. R. was completed, 1841, the Baltimore & Ohio had not reached Cumberland, Md. The Western R. R. was built for the definite purpose of connecting with the Erie canal and that chain of roads across New York state that terminated in Albany, and bring such business as it could across the Berkshires into the good, old city of Boston. It was the final selection of the southern route for the entire distance that happened to include Springfield and Pittsfield on the line, not the petitions from the citizens, that was the deciding influence.

The construction of the line over Charlton summit was difficult but the climb up through the Berkshires was an outstanding engineering feat of its day or for any other day for that matter. Pick up any railroad prospectus dating from 1840 to 1860 and you will invariably find the Western R. R. mentioned, its costs of construction and operation being held up as an example of what can be accomplished against terrific odds. That the road was a success can be attributed to two facts—the engineering skill employed in its location and construction

and its careful and prudent management during the days of its operation. No sheriff ever darkened its doors or that of its successor—the Boston & Albany, so long as they were independent.

The ride through and over the mountains is one that has never tired your author. Granted, the Berkshire hills are not as grand or as high as the Rockies, that we do not have the spirals or the loops found in the west but we do have a point that closely resembles Cape Horn on the Southern Pacific and the B & A engines work just as hard and bark as loud as any of them. The line, following the Westfield river as you proceed west from Springfield, is an ever changing panorama of river valley and mountain. Always you are climbing until Chester is reached and there your train usually gets a helper. Now both engines have their work cut out for them until the summit—Washington, is reached and from that point it is nearly all down hill to the broad, fertile valley of the Hudson.

For a few years the work of the author required him to keep in fairly close touch with the motive power on the west end. He has ridden over this portion of the road from head-end to "hack" and from coach to Pullman, with something new on each trip. These men on the west end take this as a matter of course but the writer recalls an east-bound trip on which a visiting engineer from the Pittsburgh Division of the Pennsylvania R. R. was in the cab. The B & A engineer pulled the freight to a standstill at Chester and the "Pennsy" man let out a long breath with the remark that—"he had come down a mountain many times but that was the first time he had ever come downstairs on a locomotive!" One sees a long procession of locomotives drawing their trains up this grade—the early engines from the Locks & Canals Works of Lowell; the Ross Winans engines of Baltimore with their upright boilers; Hinkley & Drury, Mason and Taunton from old New England; the famous Eddy "clocks" and other engines built in their own shops; Rhode Island and Schenectady "consols;" the big eight-wheelers from Schenectady and they were beauties too; the Pacifics have given way to the Hudsons and the Berkshire type has succeeded the "mike"—but all have been tested and all have made history on those hills for if they will perform there, the present owners or locomotive builders believe they will perform elsewhere.

And so with this in mind, we are going to turn back the pages of over one hundred years and tell you the story of a railroad, not a great one in size, perhaps, but a mighty busy one.

Chapter II

EARLY CANAL ROUTES

In 1791, General Henry Knox, had extensive surveys made by John Hills, for a canal extending westward from Boston. Two routes were surveyed, one through Worcester, the other to the north. In 1792, General Knox and his associates were incorporated under the name of "The Proprietors of the Massachusetts Canal." Authority was given to construct a canal from Boston to the Connecticut river. No active measures were taken under this charter and although charters were granted for canals within the boundaries of Massachusetts, no attempt was made to build westward until 1825.

The first canals were constructed around rapids in order to permit river navigation. One of the earliest of these was the Montague canal, five miles in length, constructed around the rapids of the Connecticut river at South Hadley. It was opened in 1792. Another was constructed around the Pawtucket Falls of the Merrimac river, permitting boats to continue up that river, by means of other canals constructed around rapids or falls, as far as Concord, N. H. In 1792 the Middlesex Canal Co. was chartered and three years later construction was started. It was destined to connect the city of Lowell with Boston, a distance of 26 miles. The route lay through Wilmington and Woburn and traces of this canal can still be seen close to the right of way of the Boston & Maine R. R. The canal paid 6% dividends annually for a number of years but the construction of the Boston & Lowell R. R. soon deprived it of nearly all its tonnage. The other canal of interest in this state was the Blackstone canal, destined to connect Worcester with the Blackstone river and thence to Providence, R. I. In the western part of the state were constructed the Farmington, the Hampshire and Hampden canals.

It is not surprising to find that Governor Eustis, at the opening of the January session of the General Court, wrote as follows:—"A water communication from Boston, to, and through the western parts of the State, would tend greatly to advance the interests of Agriculture, and of the numerous Manufactures established in the interior." True, the state had no money to devote for the construction of this enterprise but its great need could be pointed out. Accordingly, three Commissioners were authorized to be appointed for just this very purpose—Nathan Willis of Pittsfield, Elihu Hoyt of Deerfield and General Henry A. S. Dearborn of Boston. Colonel Laommi Baldwin was the Engineer.

The Commissioners reported at the next session, January, 1826. They recommended a canal through the northern part of Worcester county, to the mouth of the Deerfield river, thence up that river and through Hoosac mountain by means of a tunnel of four miles and to connect with the Hudson River near Troy, N. Y. The report gives the length of the canal east of the Deerfield river as 100 miles and west of the river as 78 miles, the total rise and fall as 3,281.34 feet—all this to be built at an estimated cost of the canal \$5,103,240.00, cost of the tunnel, \$920,832.00 making a total cost of \$6,024,072.00, which was quite a tidy sum for 1826.

Early in the same session, petitions were received from Thomas H. Perkins and others of Boston and A. J. Allen and others, praying for surveys for a *Railway* from Boston to the Hudson river. The Committee on Roads and Canals authorized the Governor to appoint three Commissioners and an Engineer, on the subject of railways. This passed the Senate but was indefinitely postponed in the House on the motion of H. Shaw of Lanesborough who opposed all measures of the kind.

At the opening of the June session in 1826, we again find Governor Lincoln advocating the construction of either a canal or railway. Shortness of the session prevented anything being done in the matter, but a select Committee of the House was authorized to consider on the expediency of the construction of a railway across the state to the Berkshires and if permission can be obtained from the government of New York state, it be extended to the Hudson river, at or near Albany. This, if you please, was the summer (1826) with the Quincy Railway, three miles in length and operated by horses, just going into operation.

The Commissioners spent a year making their investigations and reported under date of January 19th, 1827. No instrumental surveys were made since there was no appropriation for the work. The Commissioners called attention to the successful operation of railways in the hilly and mountainous districts of Wales. Several modes of constructing single and double tracks are given with provision for a horse path and paths for the drivers on each side of the track. A horse was calculated to draw eight tons on a grade of 88 feet to the mile. Locomotive engines, at that time, were confined to grades not over $27\frac{1}{2}$ feet to the mile and an engine with two eight inch cylinders, weighing five tons, will move forty tons at the rate of eight or nine miles an hour.

The Committee were unanimous in that it was practicable to construct a railway from Boston to the Hudson river, at or near Albany. However, they did not designate any route. One Theodore Sedgewick of Berkshire, had made a survey from the Connecticut river to the Hudson and pronounced that a railway was not only practicable but highly expedient. The Commissioners were of the opinion that a railroad would be far more useful to the public and much less expensive to construct and to maintain than a canal.

The June session of 1827 saw the appointment of Nahum Mitchell of Boston and Samuel M. McKay of Pittsfield, Commissioners and James F. Baldwin, Engineer, appointed to cause necessary surveys and estimates for the best practicable route, with \$10,000.00 appropriated for this purpose. Two through routes were explored. The southern, through Framingham, Worcester, Springfield, Chester, Washington, West Stockbridge, Canaan and thence to Chatham and Kinderhook to the Hudson at Albany. On this route, twelve miles were actually surveyed from Boston to Needham and from West Springfield to Albany, leaving a distance of 66 miles unsurveyed. The northern route was from Troy to Hoosac Four Corners, Williamstown, Adams, Northampton, Belchertown, Rutland, Boylston, Watertown and Cambridge to Boston. No instrumental surveys were made on this route. Animal

power was expected to be used and in no instance would the grade exceed 88 feet per mile. This report was sent to the Committee on Roads and Railways, and they, reporting under date of February 15th, 1828, were of the opinion that the railroad had assumed greater importance and that it could be constructed more cheaply than a canal.

On March 11th, 1828, a Board of Directors of Internal Improvements was appointed, to survey such routes or lines as they deem necessary between Boston to the Hudson river. New York, on April 15th, 1828, appointed a similar committee to engage in the same work and pledged itself, in this act, "that if the State of Massachusetts shall construct a Railroad from Boston to the boundary of this State, either directly, or through the medium of an incorporated company, the Legislature of this State will construct it from thence to the Hudson river, or grant to the State of Massachusetts, or some authorized company the right of so doing, and taking tolls thereon, under proper restrictions as to jurisdiction."

During 1828 surveying parties of both states were actively engaged in determining the more favorable route. In New York State, two routes were surveyed; one from Troy through Pownal to Adams, the other from Albany and Hudson to West Stockbridge, the lines from Albany and Hudson uniting at Chatham. The task of the Massachusetts Commission was far greater in that they had to select a route which would afford the shortest and easiest line at the least cost. Three routes were considered the first of which is the present route of the Boston & Albany R. R. The second route crossed the Connecticut river at Northampton and the third followed the valleys of the Millers, Deerfield and Hoosac rivers to Troy. The second route presented difficulties in joining the first route because of the mountains. Hoosac Mountain was the obstacle on the third route—a tunnel evidently was not considered.

The Board recommended the construction of a double railway with flat iron rail, laid upon a longitudinal rail of granite, the rails of each track to be five feet apart, with space graded between them for a horse path—the elevation not to exceed 80 feet to the mile. One horse was to be used, two upon the more severe grades. An alternative for the latter was the use of stationary engines. Figured at three miles an hour, the journey could be completed in four days for freight and twenty-two hours for passengers, the latter to "speed" at nine miles an hour. The Board considered at length the use of locomotives but reached no conclusion relative to their adoption.

Governor Lincoln, in the January session of 1830 again reverted to this topic and again urged that something be done. He proposed the issuance of stock, backed by the Commonwealth, to such extent that the Commonwealth might be interested. This stock was to be redeemed from the income and advantages that would accrue from this improvement. In spite of this, the Legislature took no action, either to engage the Commonwealth or to aid private enterprises.

But the business community was becoming impatient. Already private enterprise was "testing its wings." In 1830 the Boston & Low-

ell R. R. was chartered—June 5th of that year. The year following—June 22nd the Boston & Providence R. R. was chartered and on the day following, the Boston & Worcester R. R. received its birth certificate. These roads fanned out to the north, south and west, generally, but the Boston & Worcester formed an integral part of the route from Boston to Albany. Authorized to construct a railroad in or near the city of Boston and proceed westward to any part of Worcester, the route was surveyed by John M. Fessenden in 1831. The length of the road was about 43½ miles and its termination in Worcester was 456 feet above the level of Western Avenue in Boston. It was the first railroad in Massachusetts to be opened for service when it commenced running its trains from Boston to Newton, a distance of 8 miles on April 16th, 1834. On Nov. 15th of that year, it reached Westboro, a distance of 31 miles and on July 4th, 1835, the road was opened to Worcester.

And now, with these facts clearly before us we commence the building of the line from Worcester—the Western R. R.

Chapter III

THE BEGINNING

The Western Railroad got under way slowly. Central Massachusetts was sparsely settled and those communities in the Connecticut Valley had a good means of communication on that broad river to the south. Furthermore, it was no small task to build a railroad over the Berkshires and there were many that said it could not be done.

On March 8th, 1833, the Commonwealth of Massachusetts passed the act creating "The Western Railroad Corporation." The incorporators—Nathan Hale, David Henshaw, George Bond, Henry Williams, Daniel Denny, Joshua Clapp and Eliphalet Williams, all Directors of the Boston & Worcester R. R., accepted the act one week later.

In the act of incorporation, the road was authorized to construct a railroad from the western terminus of the Boston & Worcester R. R. to the Connecticut river in the town of Springfield and across the western boundary of the state in the direction of the Hudson river, to any railroad which may be constructed from any part of the county of Berkshire to said river. It was provided that if, after ten years of operation the net receipts from tolls and other profits should amount to more than 10% per annum of the cost of the road, the Legislature may take measures to reduce the tolls. It was required that the location of the road must be filed with the respective County Commissioners before Dec. 1, 1838 and the road must be completed to the Connecticut River before Dec. 1, 1839. The state provided that it could purchase the franchise, property, rights and privileges 20 years after the road was opened. The company was required to make an annual report to the Legislature, under oath, of their acts and doing, receipts and expenditures. In addition to their right to build across the state, the railroad was also given the right to build branch lines to any town through which the road should pass or to the next town adjoining. One peculiarity existed in that if the subscription should exceed 20,000 shares, those subscribers who were stockholders for the time being in the Boston & Worcester R. R., should be entitled, in preference to others, to hold any shares subscribed by them, not exceeding the number of shares they then held in the Boston & Worcester Company. Thus, at the outset, the Boston & Worcester Company had exclusive control of the charter of the Western R. R.

For nearly two years nothing was done under this charter. Meantime, let us see what had happened on the western end of this proposed railroad. On May 5th, 1834, the Legislature of the State of New York incorporated the Castleton & West Stockbridge R. R. This act provided for the construction of a railroad from Castleton, nine miles below Albany, to the state line at West Stockbridge. Two years later—May 5th, 1836, an act was passed altering the above name to the Albany & West Stockbridge R. R. and authorized the construction of a line from the Hudson river, at Greenbush, to the state line at West Stockbridge. The authorized capital was \$300,000., the state reserved the

right to purchase the road after ten years and within fifteen years from the time of completion—paying cost and 10% interest.

A large meeting was held on Feb. 3, 1835 at Vance's in Canaan, N. Y. Here came the delegates from the various counties in New York and Massachusetts. Lemuel Pomeroy of Pittsfield was appointed chairman and R. Kellogg of West Stockbridge, secretary. Committees were appointed to secure subscriptions to stock and to collect statistics of the business that might be expected. The latter were a valuable aid when this enterprise was subsequently carried on in both Massachusetts and New York.

With the stock of this company duly subscribed, the Company was organized by a choice of directors, it being required by the charter that one should be selected from each county through which the road should traverse. Samuel Cheever was appointed Superintendent and William H. Talcott, Engineer. Surveys and estimates were ordered and made upon several routes.

To add to our confusion, a charter was granted to a railroad from Hudson, N. Y. to the state line at West Stockbridge. This was the Hudson & Berkshire R. R., the stock of which was held principally in the city of New York. The company was duly organized, the necessary surveys and estimates made and the road was located via Groat's or Chatham Four Corners. Grading commenced before either the A & W. S. or Western roads started.

With the Boston & Worcester R. R. nearing completion, it was not until the fall of 1834 that the Western R. R. bestirred itself and opened its books for subscription. At a meeting held in the Town Hall of Springfield on February 16, 1835, which was well attended, Mr. George Bliss, one of a committee appointed at a meeting held the month previous, gave a report of the inquiries made and this same committee was instructed to take measures for calling a Convention of Delegates from the various towns on or near the proposed route and to devise suitable ways and means for making a survey. Springfield was going to have this railroad!

On March 5th, 1835, the convention attended by one hundred delegates met at Worcester. Present were the Directors and the Engineer of the Boston & Worcester Company. The meeting was called to order by N. P. Denny of Leicester. Caleb Rice of Springfield was appointed Chairman and R. A. Chapman, Secretary. The objects of the convention, the importance of prompt and immediate action were freely discussed. All parties save one expressed a willingness to contribute the necessary means for the expenses of the preliminary surveys and estimates. Curiously that one exception was Mr. Rejoice Newton, delegate from Worcester, who stated quite frankly that since Worcester was now the terminus of a railroad from Boston, their citizens believed its extension would be injurious to them and that although they would not throw any obstacles in the path of the new enterprise, neither would they contribute to the proposed extension.

As the result of this convention, it was reported by resolution that a railroad from Worcester to Springfield was greatly to be desired, was feasible and ought to be commenced without delay. That an accurate survey and estimate should be made during the coming season and that a committee of three in each town interested, be appointed to solicit subscriptions for that purpose. That an Executive Committee of five be appointed to procure surveys and estimates, to obtain information as to construction and probable income of the proposed road, together with power to appoint a Treasurer. The committee consisted of George Bliss, Caleb Rice and W. H. Bowdoin, all of Springfield, Joel Norcross of Monson and N. P. Denny of Leicester. The Directors of the Boston & Worcester Co. were requested to organize the Western Railroad Corporation as early in their opinion as the stock could be taken up and upon the same terms that the Boston & Worcester was first organized. Thus the dormant enterprise was set in motion by the energies of the residents of our central towns.

With the consent of the Directors of the Boston & Worcester Co., John M. Fessenden, their Engineer, was employed in this survey. By May, 1835 he had two parties in the field. A partial report was rendered to the committee by July 1st of that year and the route from Springfield to Hartford was examined with the view to handle business from Boston and New York via Springfield.

Agents were sent into the various towns to examine the stage books for the number of passengers that would probably use this route, for the amount of tonnage that might be shipped. No stone was left unturned by this committee and then they made a full and detailed report to the Directors of the Boston & Worcester R. R. and to it they attached a pamphlet of sixteen pages, as the basis for securing subscriptions to the stock of the company.

Now the reason the Hartford surveys were included in this estimate was simply this. As early as 1835 there was a movement made in Hartford to build a line directly across the country to connect with the Boston & Worcester at Worcester. In May of that year, the Legislature of Connecticut incorporated the Worcester & Hartford R. R., to construct a railroad from the termination of the Hartford & New Haven R. R., in Hartford, to the northern boundary of the state in the most direct and feasible route towards Worcester. Surveys were made and it was contemplated asking the Massachusetts Legislature for a charter to build a line from Worcester to Albany, via Hartford.

On July 2, 1835, the Hon. Levi Lincoln presided at a two day meeting held in Worcester. Twenty towns and cities in Connecticut were represented and fifteen from Massachusetts. It was a day of long, eloquent speeches and the proponents of each route expounded vigorously. Mr. Nathan Hale furnished statements relative to the Boston & Worcester; Mr. George Bliss submitted a full statement of the surveys and estimates of the route to Springfield and thence to Hartford; Mr. John A. Rockwell outlined the advantages of the Norwich route and General Johnson of Hartford roared that the direct route was the only true route

towards New York City and would eventually form a link in the line of roads from Canada to New Orleans.

Although this meeting may have been the means of letting out some long pent up oratory, it did serve to call attention to the need of extending lines of communication beyond the borders of the Commonwealth. Furthermore, the progress and success of the Worcester, Providence and Lowell roads, together with the report of the Executive Committee, served as the final event—on July 15th, 1835, the Boston & Worcester R. R. advertised the opening of the books of the Western R. R. in Boston, New York, Springfield, Worcester, Albany, Hudson, Pittsfield and Lee and that they would remain open for ten days from August 3rd, the date of the opening.

The terms of the subscription recited the importance of raising \$100,000. immediately for the purposes of making surveys and commencing preparations. The following conditions were imposed upon each subscriber—that an assessment of \$5.00 be laid upon each share as soon as practicable to be applied to costs of surveys, estimates and construction of the road. That the work progress from Worcester, westward, meeting at the state line the work in progress in the State of New York. The third condition I have already given at the outset of this chapter relative to the control held over this company by the Boston & Worcester. Subsequent conditions were added after the books were opened—that the Corporation should not be organized until two millions were subscribed by responsible parties; that the subscriptions shall not be binding, unless the whole number of shares shall be subscribed on or before the first day of April next and that the construction of the road shall not be commenced until the sum of ten dollars per share shall be assessed and paid in on each share.

Thus, between the interest of certain Springfield parties and a railroad convention, the Boston & Worcester R. R. was finally forced to launch the Western R. R. on its career.

Chapter IV

STATE AID

There were many who doubted that the enterprise would ever be productive. Would there be enough traffic to make the railroad profitable and how did they know that locomotives could surmount the Berkshires, let alone pull any kind of a load? These were some of the many questions that were asked and the general retort was that the magnitude of the enterprise warranted the population in the cities and towns to subscribe according to their ability, even tho' these subscriptions became a dead loss. But despite the efforts of all concerned, about seven thousand shares were lacking when the books were closed on August 13, 1835.

A meeting was called for the evening of October 7, 1835 to be held in historic Faneuil Hall. The Hon. D. Henshaw called the meeting to order and the Hon. Abbott Lawrence was appointed chairman. From Albany, Hudson and the interior towns came the delegates. They were a determined lot. The Hon. Hermanus Bleeker of Albany closed his remarks with—"Whether Boston decides to build the road from Worcester to West Stockbridge or not, the road from Albany to West Stockbridge will be built." Resolutions were adopted for appointing a committee of six, at large, and three for each ward in Boston and for each city in the vicinity, to solicit further subscriptions. The committee of three was pledged to call upon every man in their several precincts and to do his share in the construction of this enterprise. Amid great applause, the Hon. Edward Everett closed the discussion.

The committee went to work. Capitalist, merchant, the professional man and the mechanic—none were overlooked. At the end of a month, 18,300 shares had been subscribed, leaving a deficiency of 1700. Another meeting, this time of all of the committees, was held at 7 P. M. in the old Common Council room on Nov. 27th. Something must have been said that brought results because on December 5, 1835, the required amount was obtained with a sufficient surplus to provide for losses and contingencies. In all, there were 2,200 subscribers to the stock.

With this accomplished, the Directors of the Boston & Worcester R. R. gave notice, as required in the charter, for a meeting to be held on January 4th, 1836, in the Court House, Boston. On that day the Corporation was duly organized and the following were elected to serve as Directors: Thomas B. Wales, William Lawrence, Edmund Dwight, Henry Rice, John Henshaw, Francis Jackson and Josiah Quincy, Jr., all of Boston; and Justice Willard and George Bliss of Springfield. On January 7, 1836, Governor Everett in addressing the Legislature remarked—"I regard this enterprise as promising benefits to the people of this Commonwealth, to an extent not easily to be estimated. It will place the state in direct connection with the most extensive system of natural and artificial internal communication, by canals, railroads, rivers and lakes, which exists on the surface of the globe. It will restore to her a large natural commerce, which has left her, and retain that which is rapidly departing in the same direction. Should the work, in its

progress, stand in need of resources beyond the reach of the enterprise and means of the individual citizens by whom it is undertaken, it is believed that the public patronage could be safely extended to it, as a project of vast general utility, whose successful execution would form an era in the prosperity of the State."

The Minutes of the Directors of the Western R. R. commence on Jan. 13, 1836, with a meeting held at 27 State St., Boston. Thomas B. Wales was chosen President. Ellis Gray Loring, as Clerk, was to record the minutes of the Directors and Stockholders in his clear handwriting which has not faded all these years and Josiah Quincy, Jr., was elected Treasurer. A committee was appointed to consider and report upon the system to be adopted for the construction of the road. At the next meeting held on January 30th, it was voted to oppose the petition of Henry Hudson and others of Hartford, for a charter to build a railroad from Hartford to Worcester and Mr. Bliss was authorized to employ such counsel as he might deem proper. One can hardly blame the Western R. R. for their attitude.

On March 16th, the committee reported in favor of employing engineers of experience and science, to build the road under such instructions as might be given by the Board from time to time. This plan being adopted, the committee under the authority given them, announced that they had secured the services of Major William Gibbs McNeill as Chief Engineer and Captain William H. Swift as Resident Engineer, the latter to devote his whole time to the survey, location and construction of the road. These appointments were made by the Board at this meeting. On the next day, the Board appointed George Bliss as General Agent of the Corporation. No wiser appointment could have been made for Mr. Bliss, more than any other single individual, had been the prime mover of this enterprise. At a subsequent meeting, his duties were defined, that he be authorized, in behalf of the Corporation, to make all contracts, transact all business which he may deem necessary for its interests and that he devote his whole time to the work and be responsible for its execution. The engineers were instructed to examine and survey the line between Worcester and Springfield and report their results to the Board as soon as convenient.

Let us follow for the time being the activities in the field. In April of this year Captain Swift had two parties in the field east of the Connecticut river and three west of the river. Between Worcester and Brookfield several surveys were necessary because of the summits. A line of levels was run for fifteen miles northerly and southerly to get the lowest depression in the ridge. The route that was finally recommended by the Engineers and adopted by the Directors upon personal examination by that body, involved so large a deflection to the south that two other lines were ordered run. The first passed north of New Worcester, a little to the south of the village of Leicester and then over Grout's summit in Spencer to Brookfield. Here the grades were found to be 80 to 110 feet for six miles. A still more northern route was surveyed from Worcester through Rutland and Barre and then down

the Ware and Chicopee rivers. Here summits were found higher than those at Spencer and Charlton. As the result of these several surveys, the route originally recommended by Captain Swift was adopted—the Charlton line around the southern end of Henshaw ridge—and, by order of the Board, it was placed under contract. The winter saw grading commenced at the crossing of the Worcester at Hartford turnpike near Captain Jonas Tucker's in Charlton.

The second division between Brookfield and Stony Hill in Wilbraham presented few difficulties and the route suggested by the Engineers was adopted. The third division from Stony hill to Mount Tekoa in Montgomery, $12\frac{1}{2}$ miles west of the Connecticut River and 20 miles from Stony involved not only the crossing of the Connecticut river but the approach to and over the Berkshires. Several routes were surveyed, crossing the Connecticut at various points and one was even surveyed through Ludlow, Granby, South Hadley, crossing the Connecticut at Rock Ferry, thence northerly of Mount Tom to Easthampton, Southhampton and Westfield. Although this line was six miles longer it had easier grades but, it omitted Springfield and the charter stipulated that Springfield must be on the route. There was considerable conjecture as to its ultimate location, speculation even in the matter of land which was foreseen by the General Agent and who was shrewd and loyal enough to outwit them. Finally, the Garden Brook route, the present one of course, was approved by the Directors, as having the least maximum grade and the least cost of grading and bridging.

While the surveying parties were in the field, let us return to Boston and Beacon Hill. Mention has been made of the petition of Henry Hudson and others to build a line from Worcester to Hartford. A similar petition was received from Lester Filley and others of Berkshire for the right to build a line from Hartford to West Stockbridge. Both petitions were referred to the Committee on Railways and Canals.

It was only natural that the Directors of the Western R. R. should consider both projects a diversion from their own. The line from Worcester to Hartford was surveyed by Alexander Twining. It was shown that this route would involve expensive rock cuttings, one tunnel over one mile in length, one bridge 1000 feet long and 45 feet high and a maximum grade of 45 feet to the mile. Altogether, it looked like an expensive piece of railroad building. Curiously, Mr. Rejoice Newton and his cohorts of Worcester, favored this route. Evidently they felt an affection for Hartford which they did not feel for Springfield. At the hearing it was shown that explorations had been made from Hartford towards Otis and West Stockbridge for the purpose of building a road competing with the Western. The Committee reported in the Senate that the petitioners have leave to withdraw. The report was fully discussed and accepted by the majority, not without some opposition from the Worcester parties, and thus the Western became a bit more secure in its position.

It was on January 16, 1836 that Mr. George Ashman presented a petition to the Legislature for state aid. This petition represented that

there were over 2,200 subscribers to the stock, that they were widely scattered throughout the state, that the amounts held were small and by men of limited means rather than by capitalists and that so far the stock had been taken with a certainty of no direct profits to the holders but with a view to the public interests. The Company did not ask for a loan or a subscription to their stock from the Commonwealth, they asked for facilities for raising their own income—an act to incorporate The Western Railroad Bank.

This bank was to be located in Boston, to have a capital of five million dollars. The petitioners alleged that this additional capital would be needed by the withdrawal of several millions of the United States Bank capital, renewal of whose charter had just been refused. At the same session of the Legislature, a memorial of 60 pages was received from a large committee of citizens from Boston, praying for the establishment of a bank in Boston with a capital of ten millions. Both petitions were considered by the Committee on Banks and Banking and the Corporation was fully heard. On March 11, 1836, Mr. William Lawrence, from the Committee, reported in the House—"An Act to establish the State Bank of Massachusetts."

This act provided for a bank with a capital of ten millions, half the stock to be subscribed and owned by the state, remaining half to be opened to subscribers. Without considering the banking provisions, we are interested in the tenth section which required that the Bank's Directors to subscribe to 10,000 shares in the Western Railroad Corporation and to pay all assessments on same. This bill created plenty of excitement though it was drawn so as to enlist support from both city and country. Friends of the Western R. R. approved it but the Democrats would have nothing to do with this "monster." Among them were many who favored aid to the Western R. R. and saw with growing alarm that the bank bill might probably pass. Accordingly, on March 26th, the Committee reported a bill, directing the Treasurer of the Commonwealth to subscribe one million dollars to the stock of the Corporation, to pay all assessments thereon and it provided that three of the Directors should be chosen by the Legislature. This bill passed both the House and the Senate and became a law when signed by Governor Everett on April 4th, 1836.

The bank bill was rejected in the House on March 30th, reconsidered the next day and passed to a third reading but the bill for the subscription of stock being considered safe, the bank bill was postponed on motion of Mr. Lawrence who had reported it. The passage of the bill for the Commonwealth to subscribe one million dollars seemed to guarantee the success of the road for at that time no one doubted the ability and the willingness of the private stockholders to pay their assessments in full.

Chapter V

THE DIRECTORS DIRECT

Let us go back a bit and study the management of this Corporation. Although the creation of the Western R. R. was forced from the Boston & Worcester R. R. by certain parties, upon its creation the Boston & Worcester had no voice in its management. The first list of Directors, that of June 13, 1836, name T. B. Wales, F. Jackson, Josiah Quincy, Jr., I. Henshaw, George Bliss and E. Dwight as the Directors of the Western R. R. Much depended upon this group to bring this enterprise to a successful conclusion.

The minutes of the Directors, written in the clear handwriting of Ellis Gray Loring, the Clerk, have been preserved and are now in the Baker Library. The first entry carries the date of January 30, 1836, when it was voted to oppose the petition of Henry Hudson and others of Hartford, for a charter to build a railroad from Hartford to Worcester and Mr. Bliss was authorized to employ counsel as he may think proper. As the enterprise grew, not one but a committee, composed of their number were appointed to carry out or to inquire into certain matters. As we go through these records, we find that subsequently there was a Committee on Finance, on Engines and Cars, on Procuring Rails, on Fares, on Salaries and Wages, anything and everything connected with the construction and operation of a railroad. It was not uncommon for a Director to be on more than one committee, there were sometimes not enough to go around, but upon the appointment of a committee for a certain purpose, that committee, whether its purpose was to ascertain the proper route for the road or to procure rails, immediately became engaged in its purpose. Upon the completion of its work, a report was rendered to the Directors and this report was discussed, accepted or rejected as the case might be. Ellis Gray Loring, the Clerk, assigned the report a number which was duly entered in his minutes of that meeting and the report of the committee was placed in his file. These reports have been carefully preserved and the reader cannot but be impressed with the care and diligence that these men fulfilled their duties. No one can ever state that the directors of this corporation did not direct the course of this enterprise through its many vicissitudes. True, they made mistakes, but they were soon rectified, but they had a tremendous task, beset with many obstacles but by hard labor they made it a success.

On March 16th, 1836, the directors voted that William Gibbs McNeil be appointed Chief Engineer and William H. Swift be appointed Resident Engineer for the survey, location and construction of the road. The next day George Bliss was appointed General Agent for the corporation. To appease many people who believed that the Sabbath should be a day of rest, the directors voted on June 13th of that year—"That no cars shall run on the Sabbath on the Western R. R." On the same day it was voted that the Agent and Engineers be requested to report to the board the manner and material which they recommend for the

construction of the Western R. R. from Worcester to the Connecticut river, with the estimate of cost.

Two months later, Aug. 25th, at the Worcester House in Worcester, the directors examined the plans of the survey and the maps and visited the territory through which the road was to pass. As the result of this inspection, the Engineer was authorized to survey the route of Mr. Baldwin from Worcester to the Chicopee river valley and a committee was appointed for the site of the depot in Worcester. On October 4th of that year, Messrs. Whistler and Swift reported on this survey and the board decided on the present route, via Charlton, Spencer and Brookfield as the better of the two. Accordingly, the Agent and the Engineer were authorized to make contracts for the grading of that portion of the road. The road was to be graded for a single track, the embankments, however, were to be 12 feet wide at the top and the cuttings from 14 to 20 feet wide, capable of bearing another track. On the next day, Oct. 5th, the board voted that Capt. G. W. Whistler be recognized jointly with Major McNeill as Chief Engineer of the Corporation.

On Jan. 21, 1837 the survey between East Brookfield and Stony Hill was accepted. On March 2nd the board authorized a committee to procure and purchase suitable and sufficient lands for the depots in Worcester, either from the Boston & Worcester R. R. upon the Hathaway farm, or from other persons, near to or within convenient distance of the same and upon the track of the road as established. On March 22nd, the Engineers made a report upon the route around Mount Tom and the route from Stony Hill in Wilbraham to the Connecticut river, be accepted and the road be located as far as Amory Street, Springfield. On April 4th, the Garden Brook route, curving southerly, so as to pass through the village of Springfield was authorized and two months later, the depot in Springfield was located on the west side of Main Street.

On June 15th, 1837, the board ordered that the maps and profiles of the route west of the Connecticut river be exhibited to all persons interested. On Aug. 8th, the Agent and Resident Engineer were authorized to negotiate with the Hampden & Hampshire Canal Co. to have the Western R. R. locate their road upon or adjoining their lands. On the same date, the board ordered the location of the road, west of the Connecticut river, through the towns of Washington, Hinsdale, Dalton, Pittsfield and Richmond, on such definite line as may hereafter be established by the board.

On Nov. 27, 1837, the board ordered the Engineer to establish depots at

1. Northerly of Howards Bridge at South Brookfield
 2. On or near the Brimfield road southerly of West Brookfield village
 3. Upon or near the common in Warren Village
 4. Southerly of Ludlow Factories upon or near the farm of Nathan Stevens
- all east of the Connecticut river.

On Feb. 14, 1838, two other depots were added, one in Palmer near the home of John Watson about half a mile east of Sedgwick's tavern and another in the village of Clappville in the south part of Leicester. At this meeting it was ordered that the Agent and Resident Engineer be a committee to decide upon the size and kind of wood of the wooden part of the superstructure and that such timbers be procured for this purpose as they shall direct. A week later a committee was appointed to consider and report on the best mode of obtaining iron (rails) for the Western R. R. On March 7th, the President was authorized to order the importation of 1600 tons of rails.

On March 21, 1838 the board adopted the selection of the route (west of the Connecticut river) from Westfield, near Tekoa Mt. to the western boundary of the state at Canaan's Gap in West Stockbridge. At the same meeting a committee was appointed to examine and inspect the work in progress between Worcester and Springfield, especially the contracts and the method of the Engineer used in keeping his accounts. A committee was also appointed to examine and report on the expediency of making any arrangement with the Hudson & Berkshire Co. for building a railroad from West Stockbridge Village to unite with the Western R. R. Two months later the Agent was authorized to negotiate with the New Haven & Northhampton Co. for the location of the road in Westfield.

At this meeting, May 8th, 1838, the Engineers were ordered to visit any railroad depots in the United States and to examine and report upon the subject of depot buildings, engines and cars for this corporation. At the same time, Major Whistler was ordered to prepare drawings and superintend the construction of six ten ton and two fourteen ton locomotives, four cars to accommodate 52 passengers, 8 cars for 26 passengers and 50 burden cars, the President, Agent, Chief and Resident Engineers, serving with Major Whistler as a committee for this purpose. A depot at Charlton was ordered to be established at this meeting.

On Dec. 12, 1838, the maps fixing the definite location of the road from Worcester to the Connecticut river were signed by the Resident Engineer, the directors; countersigned by the clerk and filed with the Commissioners of Worcester and Hampden Counties.

One of the earliest, if not the earliest and certainly the best school in this country at this time, for the training of engineers, was the United States Military Academy at West Point, N. Y. These young men, upon their graduation, were commissioned officers in the United States Army. But the rise and growth of our internal improvements caused many to resign their commissions and enter a more lucrative field. Congress finally forbade this exodus and under date of Dec. 27, 1838 we find in the minutes that a memorial be presented to the Congress of the United States, to be signed by the Directors, praying that the law of the last session of Congress which forbade the employment of any officers of the U. S. Corps of Engineers in any other than in the service of the United States after July, 1839, be amended so as to exempt from its operations

all those officers, who at the passage of it, were already engaged in the construction of private works of internal improvement or that a law be passed authorizing Capt. William H. Swift, the Resident Engineer to remain in the service of this Corporation for a length of time sufficient to allow the completion of the Western R. R.

On Jan. 13th, 1839, the board ordered that the depots and buildings at the stations of Worcester, Clappville, West Brookfield, Warren, Wilbraham and Springfield be erected according to the plans and letter of the Resident Engineer. Four more passenger cars, each holding 24 persons, two of them to be constructed with partitions, were ordered for the road. Grading started on the west end when the board, on Feb. 12th, ordered that portion graded from the Connecticut river to Middlefield.

Mar. 19, 1839, the board reversed its former decision by building one large passenger coach in place of the two smaller ones ordered. Because of the delay in building the road between the State line and New York State, a committee was appointed to visit Albany and Troy to confer with persons interested and to make such arrangements as are deemed expedient. Suitable buildings for the repair of locomotives were ordered erected at Springfield and tools for same were ordered procured. The Engineer was ordered to inquire and to report his opinion of the expediency of kyanizing timber used in bridges and superstructures of the road. And on this date comes the first break in the official family when the resignation of William H. Swift, Resident Engineer, was read and accepted, effective July 5th, 1839. His duties were assumed by William McNeill and G. W. Whistler, both with the title of Chief Engineer.

With the completion of the road between Worcester and Springfield, arrangements were made with the Boston & Worcester Co., on Sept. 27, 1839, under which the latter company shall pay the Western R. R. 10c for each passenger passing upon both roads but not over the whole extent of both and 25c to be paid for passengers passing over the whole extent of both.

While we have been following the actions of the Directors and their work to complete this enterprise, let us take a glance at events were shaping themselves in Boston and elsewhere. The passage of the state aid bill seemed to guarantee the success of the road for no one doubted that the private stockholders would not fulfill their obligations. Under this Act, the Legislature chose Messrs. Isaac C. Bates, William Jackson and R. Rantoul, Jr., as Directors. At the next annual meeting the old board was elected save that the three state directors succeeded Messrs. Lawrence, Rice and Willard. These three, together with the six names mentioned at the outset of this chapter, served as the nine directors of this corporation. Before starting on the work of grading the road, it was necessary that \$10.00 should be paid on each share of stock. The Treasurer found this collection no easy task. The first two \$5.00 assessments had been readily collected. Parties had moved away, others were unable to pay and some claimed that having paid \$5.00

they could surrender the stock and this they were willing to do. It was only through the efforts of Messrs. Otis and Sears and others in Boston that the Treasurer was able to report the requisite amount paid in on every share in the mid-winter of 1836-7.

The financial storm of 1837 did not spare any community in this land and Boston and all of the stockholders of this enterprise suffered as did every one else. The estimates of the Engineers for building the entire line were before the board in the summer of that year. It called for a huge sum of money—for those days—\$4,000,000.00. Assuming that all of the assessments could be collected, the board could furnish only three-fourths of that amount and they deemed it imprudent, under the present conditions, to make further assessments. A meeting of the stockholders was held Nov. 23, 1837 and the directors were instructed to apply to the Legislature for a loan to the Corporation of the credit of the State, for eighty per cent on the amount of the stock, by a state scrip, having thirty years to run at five per cent payable in London with warrants for the interest.

Emory Washburn of Worcester presented the petition on January 13, 1838 and after a masterful speech, showing his careful preparation of the subject, the petition was referred to a joint select committee. The committee made a careful investigation and it was no secret that without further state aid the enterprise must fail. The committee thought the stockholders should pay in thirty per cent instead of twenty and that the loan should be limited to seventy per cent to be paid in installments as the assessments were laid. Evidence should be given of the expenditures of prior installments; that a sinking fund should be provided, to which should be paid any profits on the sale of the scrip, and, after the road was opened, one per cent of the amount of the loan should be annually paid into this fund, from the income of the business, the whole to be placed at interest for the final redemption of the scrip. They accordingly reported a bill granting the credit of the state for \$2,100,000.00 by the issue of scrip, payable in thirty years from the dates of issue, five per cent interest—interest and principal payable in London. This would leave one million to be paid by the stockholders in addition to their thirty per cent on their stock. Again Emory Washburn spoke eloquently on the subject and the bill was finally passed by both House and Senate on Feb. 21, 1838. It injected new life in the enterprise and work went on apace.

We have already mentioned the fact that the directors made an examination of the contracts, the method of accounting used by the Engineers and the salaries and duties of the various officers. This was caused by several differences of opinion held by the Board. Two of their number, Messrs. Charles Hudson and Amasa Walker, (the former being a State Director) served as a committee to carry out the investigation. For several days they went over the road, making inspections and inquiries and on July 24th, 1838, they made their report which is printed in the Annual Report to the Stockholders, February, 1839. After stating in detail the work of the Engineers and their trial surveys, the final

location, the letting of the contracts, the supervision of the work and the duties of the Agent, they state that they "are fully satisfied that there is business enough in each of the departments to engross the whole time of the several officers employed, and in the agent's department at times extra labor is indispensable." The Committee could find no case of neglect and the Board and Corporation is to be congratulated upon their good fortune "in selecting wise, judicious and faithful officers in all the departments of their business."

The effects of the panic of 1837 were still felt at the close of 1838. Assuming that the state grant for seventy per cent of the capital would relieve them from further assessments, the stockholders had made every effort to pay their six assessments a total of \$600,000. upon the private stock. It was deemed unwise to make further assessments at that time and the company, with a large force of men employed throughout the line, again appealed to the State. For this purpose, the Agent, on Dec. 11, 1838, submitted to the Board a detailed statement of finances together with an estimate of the Resident Engineer of the cost of completing the entire line. The following results are given:

1. East of the Connecticut river, about fifty-four miles, the Resident Engineer estimates the

Graduation, masonry, bridges and engineering at	\$1,117,569.93
Superstructure	496,318.37
Engines and cars	87,150.00
Buildings, etc. at stations	38,125.00
	<hr/>
	\$1,739,163.30

The Agent added

For miscellaneous expenses	\$34,652.72
For land damage, fencing and depot lands	90,913.10
	<hr/>
	125,565.82

Total cost east of the river	<hr/>	\$1,864,729.12
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2. West of the river

Graduation, masonry, bridges and engineering, (The latter item to Dec. 1840, only) superstruction, engines, cars and buildings	\$2,213,493.47
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Added as before

For miscellaneous expenses	\$28,497.12
Land damages, fencing and depot lands	84,452.02
	<hr/>
	112,949.14

Total west of river, (in Massachusetts)	\$2,326,442.61
Total cost of 116.6 miles	<hr/>
	\$4,191,171.73
The funds provided were—six assessments	

at \$5.00 each on 30,000 shares and interest,	
less probable loss	\$ 910,643.30
Proceeds of State scrip, if sold at par	2,100,000.00
	<hr/>
	\$3,010,643.30
Balance—deficiency to be provided for	\$1,180,528.43

Again the stockholders instructed the directors to petition the State for aid and after a hearing of several days in which the officers were carefully examined, a report, accompanied by a bill for a state grant of scrip to the amount of \$1,200,000.00 was drawn up. The bill required the paying of the seventh and eighth assessments of \$5.00 each and that four of the nine directors should be chosen by the Legislature by joint ballot. It was finally passed and approved by the Governor on March 23rd, 1839. One can hardly deny that the old "Bay State" participated in this enterprise, neither was she lax in her financial arrangements. Events proved the wisdom of her policy, which was followed in some states to their own satisfaction and to those that did not heed it— to their own regret. No one can read the records of the Directors, that they placed every ounce of honest effort at their command in building this first trunk line.

Chapter VI

EAST AND WEST

Thanks to the aid of the "old Bay State" the work was vigorously carried on in 1839 and on October 1st, of that year, regular passenger trains commenced running between Worcester and Springfield, a distance of 54.697 miles. Freight trains did not commence running until the 23rd of that month.

It was a gala day—that opening to Springfield and it did much to increase the popularity of the project. Each stockholder was given a free ticket to pass over the road and back, good any time previous to April 1st, 1840. Needless to say the Governor, Lieutenant Governor, members of the Council, Directors of railroads entering Boston and Worcester, newspaper editors, all were remembered with free transportation. It could hardly be otherwise. Lastly, each director of the Western R. R. was furnished with ten free tickets, to be used in any way that he deemed best. The city of Springfield had their own celebration on October 3rd and again the railroad carried persons attending the celebration free of charge. Yes, it was a great day for the Western R. R., the city of Springfield and the State of Massachusetts.

While the Governor, Lieutenant Governor and Council were attending the celebration, arrangements were made for them to visit the road in progress of construction west of the Connecticut river. The line was already under contract and materials for the bridge at Springfield had been procured but the work through the mountains, especially in the summit sections of Washington, was difficult and expensive. It took time to drill through those rock cuts—blasting was not used and it took time to erect the many stone bridges.

But if the building of the line west of the Connecticut river was beset with physical difficulties, there were others as well, chief of which was the slowness on the part of the Albany & West Stockbridge R. R. in building to the state line. Up to January of 1840, the road had not been placed under contract and there seemed no likelihood of the work getting under way. With the Hudson & Berkshire R. R. building up from the Hudson river, this would cause a joint occupancy of the track between Chatham and the state line. The H & B had excessive curvature, steep grades and used a flat rail and it was not a desirable outlet for the business of this trunk line. The Directors of the Western R. R. wanted the City of Albany to build the Albany & West Stockbridge R. R. The Legislature had authorized the city to borrow \$650,000.00 for that purpose and subscriptions had been made to \$250,000.00 of stock. Albany was a bit doubtful. She was reaping the benefits of the Erie Canal and the chain of railroads extending westward. Hudson river steamers docked at her piers. Why should she pass this lucrative business to Boston? New York City did not want this Western R. R. completed, thus diverting the business from her port. On the other hand, the City of Troy would have welcomed this project with open arms.

The friends of the Western R. R. decided there was no time to wait. The stockholders met on Feb. 12th, 1840 to investigate this problem. Their findings were reported a month later—March 12th. Six days later, a body of delegates met with the citizens of Albany. Jared L. Rathbone, Mayor of Albany, presided at the meeting and Messrs. Bliss, Derby, DeGrand and Walker of the delegates spoke for the enterprise. The Massachusetts men used all their powers of persuasion. A resolution was passed giving the project their hearty support but it was at a subsequent meeting of the delegates with the Directors of the Albany & West Stockbridge R. R., that the latter suggested that the Western R. R. should build, manage and operate the road, the funds provided by the city. Preliminaries were arranged and on April 23rd, 1840, a contract was perfected between the city and the two railroad companies, as follows:

The city agreed to subscribe \$650,000.00 to the stock of the Albany & West Stockbridge R. R., or take a transfer to that already subscribed by individuals, and pay for the same in city scrip or bonds at thirty years, with six per cent interest, principal and interest payable in Boston.

The Albany & West Stockbridge R. R. agreed to entrust the Western R. R. with the location and construction of their road, that they would preserve the legal organization of the Company, (with provisions in case the Hudson road was hired or purchased,) and gave the Western R. R. exclusive control with all rights of transportation and would, on request, make a permanent contract of transportation with the Western R. R.

The Western R. R. agreed to construct the road, open it for use as soon as convenient, provide and run the same for the accomodation of the public and faithfully apply all monies received from the scrip, to the construction, except a sum sufficient to pay one year's interest on the bonds, and ten per cent of the principal to be paid to the Sinking Fund, the bonds not to be applied to the purchase of the Hudson & Berkshire R. R. until the road from Albany to the state line is completed.

Among the provisions of the agreement was one, if the New York & Albany R. R. was completed and a union formed with the Albany & West Stockbridge R. R., the Western R. R. agreed not to run its locomotives north of the village of Greenbush or the city of Albany. Another provided that the Western R. R. could erect one or more depots in the city of Albany and to connect same by tracks and to connect the Greenbush depot with them, the navigation of the river not to be obstructed.

The delegation made a report of their proceedings at a special meeting of the stockholders on May 12th, 1840. Needless to say it was accepted and the Directors appointed John Childe as Resident Engineer and George W. Whistler, Consulting Engineer to survey and examine the two routes—one via Chatham Four Corners, the other via New Lebanon. The direct route from Albany to Chatham Four Corners was preferred and here a junction was made with the Hudson & Berkshire R. R. From this point to the State line the road had their choice of

the following: first, of making an entirely new route, or second, of using the Hudson & Berkshire R. R. in whole or in part and laying down a second track upon it. Upon the latter alternative, the Engineers reported that the present track would not sustain the engines needed to handle the business of the united roads and that it had grades of seventy-one and eighty feet per mile for four miles. They recommended an independent road for the entire distance, involving a tunnel at Canaan of 600 feet, the total distance from Albany being 38.224 miles, estimated cost, \$1,412,804.00, maximum grades 40 to 44 feet per mile for nine miles.

Unfortunately the only valley through which the new road was to be built (between Chatham Four Corners and the State line) was already occupied by the Hudson & Berkshire R. R. The line was so sinuous that the new line had to occupy part of the road bed of the old line and to move their superstructure to a new location. An indenture was entered into between the two companies on March 26th, 1841, for this purpose and in moving the track of the old company and building the track for the new, the ownership of the land became beautifully scrambled. This did not become apparent until some years later, when there was a possibility that the Hudson & Berkshire R. R. might fall into alien hands and the Western R. R. found that the title to the land on which their superstructure rested was questionable, that finally on Nov. 21, 1854, the Western R. R. purchased this road from the State of New York. Under this purchase the road was reorganized and has since been operated under the name of the Hudson & Boston R. R. The New York Legislature authorized the City of Albany to subscribe a further sum of \$350,000.00 to the Albany & West Stockbridge R. R., at the same time the road was given authority to increase its capitalization to \$1,150,000.00, the difference between that and the cost of construction, to be supplied by the Western R. R.

During the year 1840, work of building the road went on apace. Of the 62½ miles of road west of the Connecticut river, 53 miles were graded and rail laid upon 35 miles. The heavy mountain sections were much advanced. Depot lands were procured and iron, timber, cars and locomotives were contracted for. Twenty-two miles of the Albany & West Stockbridge R. R. were placed under contract and the foundations of the piers and abutments for the bridge at Springfield were prepared. But, as the work progressed, it became clear that the cost of the entire project would exceed the estimates by a little over one million dollars.

The excess in graduation, masonry and bridging was caused by an increased quantity of work rather than an undervaluation of it. In the gorges it was utterly impossible to make a reliable estimate beforehand. It was thought that the ledges would furnish the material for masonry work but it was found that the stone was unfit for this purpose. Consequently stone had to be procured from a distance over roads almost impassible. The Connecticut river bridge required more than ordinary expense in the matter of its foundations and the shortness of the season to get the masonry above water increased the cost.

Then, a freshet in 1839 required the roadbed of the first 28 miles to be raised three feet and other parts had to be raised. The grading west of the river was for single track but over half the road west of the river and the worst half (in the mountains), it was graded for double track. Then, there was the Pontoosuc Turnpike Co. They had the right to operate through the gorge in the mountains and they had to be bought outright. So, all in all, it is not surprising that the engineers erred in their estimates.

Massachusetts was again appealed to for aid—the third time. The state considered purchasing the road and completing it but finally, after a careful investigation, during which time Mr. Bliss, the Agent, readily supplied the committee with all of the facts they needed, a bill was drawn and passed, granting them further aid to the extent of one million dollars. In most respects it was similar to the previous bills but now, the state elected five of the nine directors.

In the meantime the Directors had not been idle. On May 14, 1840, they authorized the Engineer to build a connection between the tracks of the Western R. R. and those of the Boston & Worcester R. R., at Worcester and that the passenger depot of the Western R. R. be established at the passenger depot building of the B & W R. R. and that the Engineer be authorized to run the cars to and from that place to deliver and receive passengers.

The next day they authorized that depots for passengers and merchandise be established at the following places:

1. Westfield—between the Canal and the new County road.
2. Chester Village—at such place as deemed best by the Committee.
3. Chester Factories—on the land of—Root, near Steven's Farm.
4. North Becket—a little north of McElwain's Tavern.
5. Hinsdale—a little north of Merriman's Mills.
6. Pittsfield—between North and West Streets.
7. Richmond—southerly of the store of Eleazer Williams and easterly of the road from Richmond to West Stockbridge.
8. West Stockbridge—on the low land at or near the west line of the state.

In an effort to speed the work a horse drilling machine was ordered placed in the summit cut.

The Engineer was authorized to lay down a turnout track on the land of the Pittsfield Society of Shakers in Pittsfield, south of the highway leading from Pittsfield to Shaker Village and to permit members of said Society to erect a suitable building to be used as a private depot. The Board, on May 15th, 1840, allowed the Hudson & Berkshire R. R. the use of the Western R. R. tracks from the State Line to Pittsfield.

On Nov. 20th, 1840 it was agreed to pay the Boston & Worcester R. R. an annual rental equal to 8% of the cost of the construction of the track which they (the B & W) had laid between their passenger depot on Main St., in Worcester to a junction with the Western R. R. tracks leading to their station.

On February 22nd, 1841, Mr. George Bliss, the Agent, was authorized to make and execute with the Post Office Dept. a contract for the transportation of the U. S. Mail.

On April 6th, 1841 a contract was signed with the Hudson & Berkshire R. R. whereby passengers and merchandise arriving at the state line shall be moved over the other road without delay and *in the same cars* to avoid the expense of transshipment.

On April 23rd the Board ordered that no trains shall be run on the Sabbath except those to convey the U. S. Mails or such as may be especially dispatched at the discretion of the Engineer.

August 14th, 1841, three depots were ordered built on the Albany & West Stockbridge R. R.—at Mordenains Kill, near Rings, about seven miles from Albany, one at the village of Niverville, about fifteen miles from Albany and one at Chatham Four Corners, near the intersection of the Hudson & Berkshire R. R., about twenty-three miles from Albany.

On November 30th, 1841, contracts were signed giving the Western R. R. virtual title to the Albany & West Stockbridge R. R. and a lease to operate the Hudson & Berkshire R. R. On the same day, William Harnden, founder of the express industry, was authorized by a contract, to handle the package express over this road. (This contract appears in full in our Bulletin #52, pages 57-58.)

Gradually the gap between the forces pushing westward and those pushing eastward was closing. The hard, flinty, granite was giving way before the hammers and drills of the workmen, the masonry bridges, some of which are still standing, were gradually completed. This road through these mountains called forth every ounce of ingenuity possessed by the Engineers and brawn and strength of the workmen. Hardship and suffering was plenty in these mountains. The twenty-eight miles between the Connecticut river and Chester Factories was opened on May 24, 1841; from the State Line to Pittsfield in the same month and the summit sections were reached on August 9th and finally, the line from Chester Factories, through these summit sections was opened on Oct. 4th, 1841. The Connecticut river bridge was completed on July 4th and three months later, the line was opened from Worcester to the Hudson river, over the Hudson & Berkshire R. R. On December 21st, 1841, by using the Hudson & Berkshire tracks between the state line and Chatham Four Corners, the line was opened to Greenbush, opposite Albany and through trains commenced running that day but the formal celebration was not held until January 4th, 1842. Thus the mountains had been conquered and thus Massachusetts and Boston and Springfield had builded and completed their line to the Hudson river and the vast territory that lay beyond.

Chapter VII

OPENED AT LAST

The completion of this enterprise called for a celebration and celebrate they did. Albany took the initiative. The municipal authorities invited the Boston "fathers" to celebrate this event. The invitation was promptly accepted and on December 27th, 1841, the Boston gentlemen, together with those from other cities, making a party of one hundred and twenty-five, left early in the morning. After a two and one-half hour stop-over in Springfield, the party again proceeded and arrived at Greenbush at 7:30 P. M. Here they were received by an Albany delegation and escorted to their lodgings.

The next morning the delegates were received in the City Hall. They were formally welcomed by Teunis Van Vechten, the Mayor and Johnathan Chapman, Mayor of Boston replied. Various places of interest were visited during the day and that evening a dinner to three hundred guests was served in Stanwix Hall. Congratulatory speeches were made but amongst them was a letter read by Governor Seward, written in 1662 in which the Governor of New York proposed to the Governor of Massachusetts, the establishment of a monthly post rider service between Boston and New York (state).

Boston, not to be out done, invited the Albany authorities and others to visit the "old Bay State." On the 29th, about two hundred and fifty gentlemen left Albany on a special train arriving in Boston at 7:30 P. M. A vast crowd awaited the coming of the "special" and the delegation was quartered in the United States Hotel, as guests of the city. The next day they visited the city institutions and points of interest and that evening a dinner was served to the western guests and a large number of citizens in the United States Hotel. Speeches were made and everyone was happy. Boston outdid herself for it was not until the last day of the year that the western delegates returned to Albany.

In the midst of these congratulatory speeches and all this jubilation, there was one "sour" note. New York City, from the first, had opposed this enterprise and now that the road was opened, the newspapers of that city, including some from up-State, did not hesitate in accusing the City of Albany of playing hostile to their interests through the issuance of bonds to aid this enterprise. Already the Western R. R. had made a contract with the Housatonic R. R., for the handling of traffic between what is now State Line and New York City. This meant that the Western R. R. was able to furnish a route and quote rates either to New York City or Boston and the New Yorkers, who had interests and depended on the Hudson river traffic, did not like it. The completion of the Western R. R. stimulated the completion of the New York & Harlem R. R. to Chatham, N. Y. and finally the building of the Hudson River R. R. to Albany some years later. Thus the commercial interests of New York were preserved.

The first rift came in January of 1842, between the Post Office Department and the Western R. R. on the subject of compensation for carrying the mails. Late in 1841, the postal authorities offered the Boston & Worcester R. R. the sum of \$188.00 per mile to carry the mails between Boston and Worcester. To the Western R. R., they offered \$150.00 per mile between Worcester and Springfield and \$100.00 per mile between Springfield and Albany. The officers of the Western R. R. deemed this unfair and, after much correspondence, in which the Department was requested to find other means of transportation, on Jan. 25th, 1842, after due notice, the road refused to carry the mails. This naturally caused much inconvenience and, with the Legislature in session, an inquiry was ordered. The Directors expressed a willingness to abide by the decisions of the Committee and the mails were restored and on March 14th, 1842, a contract satisfactory to both parties was signed.

The first break in the official family came early in that year. Mr. Thomas B. Wales, who had been President of the Corporation since its organization in January, 1836, declined re-election in January, 1842. For thirty years Mr. Wales had been actively engaged in business in Boston and was one of its most active and enterprising merchants, well known here as well as abroad. After retiring from the mercantile business he was induced to accept the presidency of the Western R. R. With an outlook none too flattering and accepting the office only through patriotic motives, through trial and adversity, he had won the confidence of the stockholders and the entire community. Finally, he witnessed the consummation of his hopes and labors with the running of the trains between Boston and Albany and having realized that, he tendered his resignation, which was accepted only with deep regret. On March 1st, Mr. George Bliss, who had been General Agent of the Corporation was elected in his place. No man had been more active in the prosecution of this enterprise and the Board acted wisely in the selection of Mr. Bliss.

On March 4th, 1842 a celebration was held in Springfield, Mass. On this day the directors had invited the Executive Officers and the Legislatures of the States of New York and Massachusetts, to meet at Springfield and exchange congratulations and reciprocate courtesies on the occasion of the new and permanent union of the two states. The Boston party arrived at 12:30 P. M., and the Albany party one hour later. The groups repaired to Masonic Hall where appropriate addresses were given by the Governors of both states. An hour was spent in introductions and social intercourse and then the guests repaired to the Town Hall where dinner was served. More toasts and speeches followed and thus, as General Root of New York put it—"The happy union of the Sturgeon and the Codfish, may their joyous nuptials efface the melancholy recollection of the departure of the Connecticut river Salmon," was celebrated.

The minutes of the Directors of the Western R. R. during the first year of operation are of more than passing interest in the management

and operation of this enterprise. After March 25th, 1842, the Directors ordered that the fare from Albany to Boston should be \$5.00; from Pittsfield to Boston \$4.00 and that the fares of the stations between Greenbush and Pittsfield and of those between Pittsfield and Springfield should be arranged so as to be proportionate to the above fares. The Boston & Worcester is to receive \$1.00 for every first class passenger holding a ticket purchased at Pittsfield or any point west thereof and a proportionate amount for the other stations. On April 20th, the fare for second class passengers was made two-thirds that of the first class.

On March 30th, the Directors ordered the purchase of a second-hand ferry boat for use between Albany and Greenbush. At the meeting of May 18th, the directors ordered:

That freight between Boston and Greenbush go through in 24 hours.

That the night work (operation of trains) be thrown between Worcester and Springfield.

That the trains start for Boston at about 5:00 A. M. and from Greenbush at about 7:00 A. M.

That the through freight be kept in the car in which it was originally placed.

That there be three passenger trips per day to start from Boston, Springfield and Greenbush respectively at 6 A. M., 12 M and 6 P. M. Trains to meet at Springfield and Pittsfield and *at no other place.*

That the 6 P. M. train go through in the night arriving at Boston and Greenbush early the next morning.

That handcars at some prior time to be run over every portion of the road before the passage of the first morning train. (At the discretion of the Supt.)

That the salaries of the conductors of the passenger trains be fixed at \$700.00 per annum.

And it was at this meeting that the resignation of George Washington Whistler, the Chief Engineer of this company, was accepted with regret, effective May 31st.

A week later the board met and the President was authorized to place a freight car of such construction as he may deem proper upon the night train from Albany or any other passenger train. (This was for express matter.) Every Depot Master was required to provide himself with an accurate timepiece for the purpose of checking the arrival of each train and to see that it has ample time to run to the next station at ordinary speed without encroaching on the time of any other train.

At the meeting on June 29th, President Bliss laid before the board a written testimonial of the character and services of George W. Whistler, which was presented to him by the directors. It was ordered that two cars be fitted up with refrigerators or that refrigerators be placed in two cars and that they be run upon the night passenger train with

the concurrence of the B & W R. R. It was ordered that every switch upon the road between Worcester and Albany be provided with a telegraph (target) consisting of white balls upon a black board.

A month later Mr. Charles A. Read was confirmed by the board as the Business Agent of the road, to be located at Boston. He was to perform such duties as may be required by the board and the Superintendent. His duty was to make special contracts with the Supt. of the B & W R. R. for the transportation of merchandise, to make purchases for the company as may be required, to arrange for advertisements and to dispose of damaged articles. The President was authorized to procure two eight wheel passenger cars and to equip one or more with air springs. Passenger conductors were required to keep a register of all passengers passing free over the road. In order to attract the freight business of the Connecticut Valley, a contract was made with the New Haven & Northhampton Canal Co. for a brick freight house to be constructed between the canal and railroad at Westfield and a turn-out track to be laid down, the terms of transportation to be fully advertised. And finally, the salaries of the freight conductors was made the same as passenger conductors and a water dock was ordered to be established at each end of the Springfield bridge and that a watchman be required to pass over the bridge every half hour during the day and night.

On September 12th, 1842, the Albany & West Stockbridge R. R., between Chatham Four Corners and the State Line, was completed and opened for use. This enabled the Western R. R. to operate its trains between these two points without the use of the Hudson & Berkshire tracks. And now that we have the enterprise finally completed, suppose we examine the costs.

The extended business of the road required additional purchases of locomotives and cars and additional depots or enlargement of those already built. These involved expenses not included in the prior estimates—it was impossible to foresee them. For example, in 1841 it was estimated that \$450,000.00 would cover the rolling stock, but by January, 1843, this figure had reached \$642,547.04. The following figures illustrate how far short the estimates of 1841 were of the actual expenditures up to January 1, 1843:

On the Western R. R., the total 1841 estimate was	\$5,235,025.87	
Amount paid and contracted for on same, up to January 1, 1843	\$5,692,007.52	\$456,981.65
On the Albany & West Stockbridge R. R., the total 1841 estimate was	\$1,412,804.00	
Amount paid and contracted for on same, up to January 1, 1843	\$1,706,929.28	\$294,125.28
Total cost above estimates		<u>\$751,106.93</u>

On January 1, 1843, it was estimated that the Western R. R. would need \$122,800.00 and the Albany & West Stockbridge R. R., \$45,054.77, a total of \$167,854.77 additional, which added to the above would make \$918,961.70 required over the estimates.

In the annual report of February, 1843, the Treasurer gave the total nominal assets for construction (assuming that the entire \$3,000,000. capital to be realized) as

Cost of both roads, as above, Jan. 1, 1843

\$7,702,097.91
7,566,791.57

Leaving a surplus, subject to contingencies \$ 136,306.34

As required by the State grants, twelve assessments of \$5.00 each had been laid on the stock prior to January 1, 1842. Two assessments of \$10.00 each and one of \$20.00 were laid in 1842, making the entire capital of \$3,000,000.00. Of this entire amount, there remained uncollected on Dec. 31, 1842, only \$56,425.00. This seems to indicate pretty well that the stockholders were solidly behind this enterprise and this in a time when the scrip of other states was being defaulted and repudiated.

In Massachusetts, there is a law that requires a report to be made to the Legislature the next year after a railroad is opened. In addition to their containing certain statistics of construction, they contain a variety of data and perhaps in no other way, can we tell briefly and describe this road.

The Western R. R., from its junction with the Boston & Worcester R. R. at Worcester, to the east abutment of the Connecticut River bridge, is

54 miles, 3,680 feet
63 miles, 0,568 feet

Total in Massachusetts

117 miles 4,248 feet

The Albany & West Stockbridge R. R., from the State line to the face of the Greenbush dock, at the Hudson River, as then constructed, was

38 miles, 1,180 feet

Total of both roads

156 miles, 148 feet

Total from the passenger depot in Boston to the Hudson River

200 miles, 468 feet

Total from the passenger depot in Boston to the Albany shore

200 miles, 883 feet

Elevations above the base line of the Worcester road on the Mill Dam, Boston:

Western depot at Worcester	473.83 feet
Charlton Summit	908.75 feet
Depot at Springfield	70.91 feet
Washington Summit	1456.51 feet
Track at State Line	916.07 feet
Summit at Canaan	954.61 feet
Depot at Greenbush	26.11 feet

On this road there were 142 separate planes, twelve of them level; ascending west, eighty-three; descending west, forty-seven.

Of the highest grades, or over sixty-nine feet per mile, there are

Of 74 feet	5.6299 miles	Of 81 feet	0.1130 miles
78 feet	1.8818 miles	82.6 feet	0.5499 miles
79 feet	4.1299 miles	83 feet	1.5056 miles

The highest grades on the Albany & West Stockbridge are of 40 to 44.88 feet for 9.053 miles.

The length of straight line on the Western R. R. is 62.9352 miles and for the A & W. S. 17.760 miles. Over one half the road was in curves—and still is.

The Springfield bridge was of seven spans, 180 feet each, or 1264 feet long. It cost \$131,612.12.

The mountain division of 13.89 miles, cost \$980,000, or over \$70,000. per mile and a single mile of it cost \$219,929.87. The summit section at Washington, 1.8 miles, cost \$241,311.39, or \$134,000. per mile.

Since the Western R. R. has been built and our railroads have pushed their way westward, our engineers have solved more difficult problems of construction through the mountains and our locomotives have been designed to surmount steeper grades. Blasting powder, dynamite and pneumatic drills have come to the assistance of the engineer. In 1842, the time the Western R. R. was completed, the Baltimore & Ohio was reaching towards Cumberland, Md. The Allegheny Portage R. R., an engineering triumph in itself was scarcely over twenty miles long. But it was here in the western part of the old "Bay State" that George W. Whistler and the men under him, had to carve their way, almost by hand, through the Berkshires. For they were building a trunk line, the first in America, a line to tap the resources of the vast west and bring them to tide water. Their monument has endured for many times a day there echo and re-echo in those hills the "bark" of the Hudson or the Berkshire type locomotive. No, the hills are not as tall nor the grades as steep as you will find in the western mountains, but the lessons learned have been passed on for others. There was scarcely a prospectus published during the next twenty years, that in a table of comparative figures and in their prospects, they did not include and recite our Western R. R. Truly, George W. Whistler and his assistants left their mark in order that others might follow.

Chapter VIII

THE WINANS ENGINES

With the road safely opened to the Hudson river, we turn now to the early motive power, the unfortunate selection of which caused the state to investigate and was the subject of much recrimination.

The first engines delivered to the Western R. R., came from the Locks & Canals Co. of Lowell, Mass. Major Whistler was a product of these works and it was only natural that the order should be placed for them. The first four engines carried the names of the counties in the Commonwealth of Massachusetts through which the road would traverse. They were typical products of the Lowell Works, of that period, in that they followed the English Planet type, with 2-2-0 wheel arrangement, 12x18" cylinders, 54" drivers and weighed 12 tons. Up to March 16th, 1842, twelve of these locomotives, each bearing a name for a county in this state, had been delivered. An inventory for that year indicates all were in passenger service, both east and west of the Connecticut river. It is only fair to state right here, that these rugged locomotives, altho' light in weight, were never worn out on this road. Increasing weight of trains caused them to be replaced by heavier machines and these first Locks & Canals locomotives were scattered on many roads, some of which we know, where they continued to give good service to their new owners.

But Major Whistler knew that if the Western R. R. was to ever earn any money for its owners, that heavier and more powerful engines than these small Locks & Canals products must be ordered. On Nov. 17, 1840, the "Massachusetts" was placed in freight service on the road. This locomotive was of the 4-4-0 type, 14x18" cylinders, 54" drivers, weighed 20 tons and cost \$10750., an increase of \$3750. over the former Lowell engines. Two more locomotives similar to the "Massachusetts" were delivered by the Lowell Works, the "New York" and "Rhode Island", in 1842, and these locomotives are frequently mentioned in the records. They gave fine service, the "Massachusetts" was scrapped in 1863, the last two in 1867.

In July, 1841, the Board appointed Messrs. Howard, Jackson, Lincoln, Bliss and Whistler a committee on moving power with authority to purchase such engines as they thought proper. On their own road they had up to this time 10 locomotives of the 2-2-0 type and one of the 4-4-0 type, all furnished by the Locks and Canals Co. To the west of them, the Hudson & Berkshire had three Norris engines of the 4-2-0 type. To the east, on the Boston & Worcester was found a miscellaneous assortment of English and American built locomotives weighing 12 tons or less and on the Norwich & Worcester were found five locomotives from Rogers, Ketchum & Grosvenor and four from Norris, all of the 4-2-0 type. The Committee, doubtless influenced by Major Whistler, would have none of them. He knew and they realized that the road must have something heavier and more powerful.

The building of the road was no secret and tenders for moving power were received from Hinkley, Norris, Baldwin and Rogers—all found in

the files. Major Whistler found time to visit and talk with these builders as did some of the members of the Committee but none of these builders could furnish what the Committee desired. The road was fast approaching completion. Something must be done and done in a hurry. Major Whistler went to Baltimore and examined a new product of Ross Winans. This was the locomotive "Maryland" an engine of nineteen tons, mounted on eight wheels, all connected, thus making the entire weight effective for tractive effort. Upon his return he reported the matter favorably to Messrs. Jackson and Lincoln and they were appointed a sub-committee with authority to purchase. In company with the chief machinist of the Lowell Works, they visited Baltimore and after satisfactory experiments, at any rate satisfactory to them, they confirmed the opinion of Major Whistler, and on August 26, 1841, four months prior to the opening of the road, the Committee on moving power closed a contract with Winans for seven locomotives, to be delivered by December 16th of that year, at a cost of \$11000.00 each. These engines—"crabs" they are called in the records, had $14\frac{1}{4} \times 24$ " cylinders and weighed $22\frac{1}{2}$ tons. They had upright boilers, cylinders mounted horizontally, which worked cranks on a shaft bearing cog-wheels engaging with other cog-wheels on an intermediate shaft. This latter shaft had cranks coupled to four driving wheels of 24" diameter on each side. They burned anthracite. Most of the builders who had submitted tenders took their loss with good grace—not so William Norris as the files indicate.

It seems quite evident that Ross Winans communicated with the Committee on moving power that he either was or would be unable to deliver all of the seven engines on the date specified. Three of these engines were built by Baldwin & Vail under an arrangement between that firm and Ross Winans. The "Maryland"—the locomotive that performed before the sub-committee, was evidently purchased as one of the seven for we find her listed as purchased under date of Sept. 10, 1841. Because of this delay, four engines were ordered from the Locks & Canals Co., the "New York" and "Rhode Island", already mentioned and two more locomotives of the Planet type, the last two of this type ever purchased. Two additional locomotives were purchased on Sept. 8, 1841 and it was these two that aroused the ire of William Norris. It seems that Ross Winans had constructed two "crabs" for the Baltimore & Port Deposit R. R., a road that formed a part of the Philadelphia, Wilmington & Baltimore R. R. These two locomotives were found wanting in the matter of operation and had been laid aside as unfit for further use. Whether the Western R. R. purchased them from the Baltimore & Port Deposit R. R. or whether Ross Winans bought them back and sold them for nearly \$5000.00 each to the Western R. R., the records do not disclose but they must have accompanied the "Maryland"—the first locomotive delivered by Winans. What their original names were or their characteristics, other than they were "crabs" and weighed 10 tons each, we do not know but they were evidently purchased because of the delay in completing the other six engines that were ordered.

The first of the remaining six engines ordered—the “Michigan” was delivered Dec. 24, 1841, the other five came in the first six months of 1842. It was not until a month later, Jan. 26th in fact, that she made her first trip to Pittsfield and on her return to Springfield her smoke stack was knocked off by one of the overhead bridges about five miles west of Springfield. Let’s follow the record of this engine. From Jan. 31st to Feb. 8th she was laid up for repairs to the blower. On the 10th she was sent to Greenbush to relieve the “Maryland” because the latter had twisted a spur wheel on her shaft. On the 12th she went through a bridge on the Hudson & Berkshire R. R. and was laid up until March 29th with repairs and alterations. On April 14th she broke the strap to her main connecting rod. Take the “Ohio”—she entered service on Feb. 1, 1842 but did not make her first trip on the road until the 15th. On the 22nd she broke the cogs on the gear while coming up the summit near Dalton. On March 1st she was again in service but on the 21st the entire front gave way letting down the spur gear shaft and breaking the cog wheels. Take the “Illinois”—delivered April 1st and placed in service on the 15th and on the first trip broke the main connecting rod taking the cylinder and everything with it.

Under date of Oct. 12, 1841, William Norris addressed a letter to the Committee enclosing a statement from one L. Phleger of Philadelphia, formerly connected with the Philadelphia, Wilmington & Baltimore R. R. In this statement Mr. Phleger asserted that “the Winans engines are deficient in principle, are on the road one day and in the shop the next rarely making a successful trip and never went out without requiring heavy repairs. Their performance was so indifferent and the repairs so heavy during the three months they were in service that the Baltimore & Port Deposit R. R., having purchased them in 1837, laid them up as unfit for use but within the last month they have exchanged them for one of a different make and these two were sent to the Western R. R.” Denials and accusations came from William Norris, the Baltimore & Ohio R. R., Ross Winans and others—it is perhaps wisest not reproduce them here but they throw an important light on the subject, much of which was brought out in the investigation by the Commonwealth of Massachusetts for they did investigate the matter and investigated thoroughly.

Before taking up this investigation let us close the matter of these nine ill-fated Winans locomotives. There is no question but the parts were too lightly constructed to handle the loads which the Western R. R. wished them to handle and which the builder said they would handle. It is true that Winans did make alterations which improved their reliability somewhat but their years of service were short—by 1850 all of them had been discarded. The statement is truthfully made in the records—“the Winans engines show greater loads at a lower cost per mile but are irregular in service and lack steam.” But out of all this came the engine with the horizontal boiler which we have today and Mr. Winans put his resourcefulness in that direction with success for at least another decade. The Western R. R. was a proving ground for new locomotives as it has been many and many a time since.

The investigation was most searching. Recognizing the fact that Major Whistler was a life-long engineer, he was in Russia at the time of this investigation, and that he was at one time superintendent of the Lowell Machine Shops, he knew the character and the capacity of the Norris engines as they were performing on the Boston & Worcester, Norwich & Worcester and Hudson & Berkshire roads. He preferred the Winans design for freight trains for which they were intended. Save for Mr. William Jackson, none of the other members on the Committee on moving power had any knowledge or experience on the subject. He, as director and agent of the Boston & Worcester R. R. was familiar with the performance of the Norris engines. The others had confidence in the opinion and skill of Major Whistler, under whose supervision these engines were to be used. At the hearings it was brought out that the stockholders had appointed a sub-committee to witness the trial of the Winans and other engines, with authority to invite others to witness these trials and that the principal railroad superintendents and locomotive builders in the vicinity were invited to attend. At the trial in Baltimore, the "Maryland" demonstrated that it could draw a train weighing 316,000 lbs, burning coal and 252,000 lbs. burning wood.

But the president, not to be outdone, before a committee of the stockholders—Messrs. Ward, Pickering, Daricott and Dickerson and in the presence of Messrs. Parker and Woodworth of the Boston & Worcester R. R., Storrow of the Boston & Lowell R. R., Lee of the Boston & Providence R. R., Pratt of the Norwich & Worcester R. R., Whitwell of the Nashua & Lowell R. R., Hill of the Eastern R. R. and Waterman of the Hudson & Berkshire R. R., together with Messrs. Hinkley of Boston and Brownell of Lowell, both engine builders, on Feb. 21st and 22nd, 1843, witnessed trials of these engines. At the close of these trials the sub-committee sent the opinion of the *experts*—"that upon one point, as regards these engines, there will be no dissenting voice, viz; that the main feature in which they differ from all others, in use on the road, is, their having eight wheels, all of which are drivers; thus making the whole weight of the machine effective, while it is so distributed as to produce the least possible injury to the road. Seven of the gentlemen invited, reported that from the trials had, as to the power of the Winans engines to draw over the eighty-three feet grade, loads of eighty tons of merchandise and sixty tons of cars, in all one hundred and forty tons behind the tender, which they were told was the performance expected of them, and for which they were constructed, they had no doubt they were equal to it, because they had seen them do more." They discovered no defect in principle and did not believe that any existed. The chief fault was the deficiency of steam, not from want of fire surface but that it arose from the short chimney rendered necessary by the upright boiler and that this matter could be cared for at slight expense. (The stacks of the first engines proved to be too high and were shortened, thus affecting the draft. Subsequently, all of the low bridges on the road were raised, permitting a taller stack as originally intended.) In the matter of consumption of fuel and repairs, it requires experience to judge; that as to the peculiar principle of these engines—abundant

adhesion, and weight on wheels, below what is used on other engines, "we regard it as of very great value and one which on any account be relinquished. It is peculiarly important on the Western R. R., because of the steep grades, requiring great adhesion to surmount them."

Again, at the request of William Norris, a committee witnessed a trial of one of his engines with the Lowell engine "Suffolk" and the committee reported that upon neither the Western or the Boston & Worcester roads was the power of the Norris engine equal to that of the Lowell engine. In the trial at Springfield, the "Suffolk" gave decided and unequivocal superiority.

And so the battle raged with reports and differences and after studying them carefully and in the light of one hundred years afterwards, perhaps the reader will be interested in the opinion of the author, one who is thoroughly familiar with the road where these engines were to perform.

In the first place we must recognize the correct principle of having as much weight on the drivers in order to secure our tractive effort. No one knew better than Major Whistler the need for this, especially with the heavy grades between the present stations of Chester and Washington. He had to leave his work of building the road in order to go shopping for locomotives that he knew he must have and at that time hardly a builder could supply him with what he wanted. This was shown in the tenders received from the builders when they were invited by the Committee. It is extremely doubtful if any locomotive, with but a single pair of drivers from any builder would have had boiler horse power enough to haul a paying load on either side of the summit. The little Locks & Canals engines demonstrated that point, but the "Massachusetts", equipped with two pairs of drivers, did much better. On this point, anyone with any average knowledge will concede that Major Whistler was correct.

The trials of the "Maryland" as witnessed by Major Whistler and the Committee indicated they were on the right path. The time was getting short—in four months the road was to be opened. What would you have done under the circumstances? What would you have had to pull your trains—horses? I daresay that Major Whistler and the Committee knew of the troubles of the two engines on the Baltimore & Port Deposit R. R., it was certainly called to their attention. I daresay that Winans felt that in his "Maryland" he had overcome nearly all or most of these troubles and that Major Whistler felt justified in his approval and the Committee in placing their order.

That these engines, when first delivered, gave some trouble, in the light of the present is not unusual. Even today, new locomotives have to have some of the "kinks ironed out of them"—that is why a representative from the builder is usually present. Whether these defects were so bad as to warrant a cancellation of the contract is not for me to pass judgement. I doubt it. We do know that Ross Winans kept these engines in repair for a year and improved them at his own expense.

It was unfortunate, in a way, that Major Whistler ever went to Russia. I daresay he would have lived longer, barring an accident, in

this country. His departure in June, 1842, for Moscow, just about the time the last of these engines were delivered, caused much blame to be heaped upon him. It is possible that his mechanical skill might have found the solution to some of these troubles. On the other hand, Ross Winans was no mean mechanic and there is no reason to believe but that he was doing his best. He had his reputation to guard, as did Whistler. Furthermore, the report of the various railroad men, after witnessing the trials, confirmed the basic principle—the entire weight on drivers—of these engines.

Once the investigations were started by the Commonwealth and the stockholders, the management of the railroad afforded the investigators every power in their means to arrive at a truthful conclusion. Unfortunately these investigations were fanned into a flame by some disinterested parties and by one disappointed locomotive builder—but the result has been an increase in the knowledge left for the railroad student. They simply proved that Major Whistler and the Committee on moving trains acted on good faith and to the best of their judgment and at this point, it is perhaps best to let the subject drop altho' references to these engines will be found in a subsequent chapter.

Chapter IX

WHY THE TRAINS RAN LATE

One of the books turned over to the Baker Library in the material received from the Boston & Albany R. R., for want of a better title, has been termed the above. It was evidently kept in the Master of Transportation's office at Springfield, and records faithfully, with adequate explanations, the delays affecting the arrival of the trains at Springfield.

The first item is dated Dec. 10, 1841, eleven days before the road was opened through to Greenbush. For nearly a year the incidents are carefully set down, but commencing in November, 1842, its interest diminishes in this respect, in that the name of the engine, together with the name of the engineer, either his time of departure or arrival and the number of cars handled are the only facts recorded. But for nearly a full year and the first year the road was in operation, the book furnishes some interesting details.

From this volume and from the minutes of the Directors, the number of trains operated when the road was first opened, was very much in the same manner as shown on the 1843 timetable, reproduced in this bulletin. An early morning train left Springfield for the east and west, the afternoon train for the east was the early A. M. train from Greenbush and the P. M. train from Springfield to Greenbush was the early A. M. train from Boston and Worcester. There were also afternoon trains from both Greenbush and Worcester and the early A. M. freight from Greenbush and Worcester and from Springfield, both east and west. Thus, on each portion of the road, both east and west of Springfield, there were three trains, two passenger and one freight, in each direction. The road was single track, the meeting points of these trains designated on the timetable and since this was before the days of the telegraph, when one train failed to show up at the appointed time, there was no alternative but to wait until its arrival and this delay was passed along to all trains that either met or connected with both. The reader must not gain the impression that the following notes are a sample of the week day operation, no trains were operated on Sundays, of our early railroads, especially the Western R. R. The evidence in this book is greatly in favor of punctuality and adherence to the time card but little in the way of incident or accident could be learned where everything went smoothly.

Fortunately for us, the handwriting in this book is very clear and the ink is as fresh as the day it was made, over one hundred years ago. The quaint wording has been retained wherever possible.

Dec. 10, 1841.

The Trains this day—both East and West have started and arrived at the hours set for time card—with the exception of the morning passenger train from the West, which train was 26 minutes behind its regular time in arriving—delay occasioned by non-arrival of the Hudson

train at Pittsfield. Conductor Adams reported as having had no news from Hudson since morning of the 9th inst at Pittsfield—on his arrival at night from the West brought with him the delayed Hudson passengers and news that the Engines of both trains had been off the track—thereby causing delays.

Dec. 17th, Friday.

Trains East and West left this morning at their regular hours. The passenger train from the west due at 12:15 did not arrive until 2 o'clock and ten minutes = delay occasioned by snow on the track—45 minutes were spent in forcing their way thro' the summit cut. In consequence of the detention of the Western train the other trains on the road were behind time in arriving at Springfield. This day has been tempestuous and stormy. So ends the day with no news or passengers from the Hudson Road.

Dec. 18th, Saturday.

Noon train from the west arrived late—other trains punctual as to time.

Dec. 21st, Tuesday.

First train from the West arrived at 2:18 P. M. Second train from the west arrived at 10:30 P. M. Late in leaving Greenbush, left Greenbush at 15 minutes before 5 P. M.

January 1, 1841.

Eastern A. M. Passenger train late 7 minutes—delay on Boston road. Western P. M. Passenger train late 57 minutes on arrival at Greenbush and 55 minutes late at night on arrival at Springfield—snow on track caused delay. Tried Engine "Maryland" this P. M. to Wilbraham and back.

January 3rd, 1841.

Eastern A. M. Freight Train down, late 1 hr. 13 min. detained in consequence of heavy train. Started with train at 6 A. M., went part way up the grade and returned—finally followed out the morning passenger train with 27 loaded cars. The A. M. passenger train down was 8 minutes in starting in consequence of freight cars in the way.

The morning Passenger train from Worcester behind its time in arriving, 35 minutes. Train from Boston not up in season.

The morning train from the west, 37 minutes behind time in arriving—the delay occasioned by the Hudson Engine not being at Chatham—came on with the engine that brought them from Greenbush to the State Line—met the Hudson engine on the track coming towards Chatham—behind her time.

The noon Passenger train for the West was behind time in arriving at Pittsfield with the "Bristol" engine—new invention packing—did not work well. The P. M. train of passengers from the West late—behind time 3 hours in consequence of delays of other trains on the road.

Freight delayed by same causes and arrived at 10:50 P. M.

This P. M. tried the Engine "Maryland." She took to Wilbraham 29 cars—long and short—few loaded, rest empty, absent 1 hr. 20 minutes, extra running 14 miles.

January 5th, Wednesday

Eastern Freight train 30 minutes behind time in starting. Engine "Plymouth" with down passenger train, when two miles beyond Wilbraham station, broke an eccentric hook and returned to Springfield—the Eastern Freight engine took the Passenger train down with the thro' freight—the "Plymouth" was in order again at 7:25 and left for Worcester.

At 10 A. M. the Engine "Maryland" started for Pittsfield, etc.

The Eastern Train, A. M. from Worcester, 22 minutes behind time waiting for down train.

The morning train from the West late—did not get to Pittsfield in time owing to engines not making steam. Trains a few minutes late in starting at P. M., also in arriving at night. The Western Passenger train 1 hour behind time. The Engine "Hampden" this day run off the track while returning towards Chatham having left Chatham to assist the regular freight train over the summit of the Hudson road; in backing down, running fast while crossing a bridge two miles west of "Chapman's", was thrown off the track and remained suspended by her wheels—impeding the progress of all other trains. In consequence of not being able to get by her, Conductor Adams did not go to Greenbush this day, but having seen his passengers safe by the wreck, returned on his down trip. An engine from Hudson was employed to take the passengers from the morning and evening trains to Greenbush, where they arrived about 8 P. M.

Jan. 6th, Thursday

The trains left as punctual as they could be got away from the depot. The freight train due yesterday P. M. arrived at 7:30 this A. M., having been 13 hours from Pittsfield on the road thro' the night, with a heavy train. They were obliged to separate and bring part of the cars over the summit at a time—night very cold—all safe—but engine some disabled—run no freight west this day.

Trains a few minutes behind time in arriving at noon—the Eastern detained by non-arrival of train from Boston—the Western detained by damage to the Engine "Franklin"—having run into a car loaded with wood; the car was on the right track but the switch on the wrong—damage to the engine not extensive but causing a detention in the starting of the P. M. train from Springfield—late on leaving depot building—1 hr. 18 min.

Second Passenger train from the west due at 6:30 arrived at 11:18 P. M., delayed by snow.

Jan. 7th, Friday

Trains departed in season—Western at 7:08 A. M. with engines "Franklin" and "Suffolk": the trains arrived regular with exception

of Western freight—Engine worked badly thro' the day, arrived at Pittsfield late and at Springfield 3:30 morning of the 8th.

Jan. 8th, Saturday

Trains in and out—Eastern at regular hours, Western a few minutes behind time. The Evening Western Passenger train reported Passenger train for Greenbush at Pittsfield off the track. The Freight arrived at 10:20 P. M. reported the train at Pittsfield as having got on the track again after a detention of 20 minutes. The engine "Franklin" run by Tucker with the train for Greenbush.

Jan. 10th, Monday

Engine "Massachusetts" helped over the summit by Engine "Plymouth" with freight train of 41 cars. At 10 A. M. engine "Worcester" arrived at Pittsfield for repairs.

Mr. Adams, Conductor of the evening train from the west, brought down with his train a long Passenger car, the forward truck of which was broken,—reported the Hudson Engine as having run into his train while on the H & B road. The Hudson engine had a train of five freight cars. Mr. Adams' train had stopped in order to repair something that had given out on his engine and while so stopping the Hudson engine came up rapidly and bunted them—damage slight. Mr. Adams, had on stopping his engine, sent a man back to inform the Hudson engine of obstruction on the track, etc.

Jan. 14th, Friday

Eastern and Western morning trains left punctually at their appointed times, with exception of Western freight which was 20 minutes late.

The Eastern noon train up punctual, the Western noon train due at 12:30 P. M. arrived at 4:10 P. M., 3 hours and 10 minutes late. Causes of delay as follows: The Western freight train from Greenbush for Pittsfield, which should have left Greenbush at 5:30 A. M., did not leave until 6 A. M., and the Conductor did not take all the cars on the track, but left four standing on the main track and did not report the fact to anyone, as having left the cars where he did. The Engineman started with the train of Passenger cars from the place where they stood over night, and while backing the train up to the Greenbush depot, run against the cars left on the track, thereby staving the baggage car and one passenger car, rendering the former unfit for use, the latter was brought to Springfield for repairs. (This report from Conductor Tilton). A delay arose of 30 minutes in consequence of having to shift injured and replace same with whole cars—50 minutes were lost between Greenbush at State Line in wooding and watering and this time, coupled with slow running over the Hudson Road made the train late into Pittsfield. Arrived at Pittsfield 11:35 A. M., left Pittsfield 12:15 P. M., arrived at Springfield 4:10 P. M., time of trip from Greenbush, 8 hrs. 40 min.

Eastern P. M. Passenger train arrived at 9:20 P. M., Eastern P. M.

Freight train arrived at 9:40 P. M., Western P. M. Passenger train arrived at 11:45 P. M., Western P. M. Freight, no arrival, not having left Pittsfield. The Conductor of the Passenger train from the West brought news of the failure of crab Engine again, caused by being pulled apart by engines ahead of her on freight train, the train having had 3 engines attached together.

Feb. 9th, Wednesday

Eastern trains all punctual. Western morning passenger train down 37 minutes behind time in arriving—lost time on the Hudson Road. Winan's Engine "Maryland" gave out today on the road between Chatham and Pittsfield—shaft broken—caused delay in arrival of Western freight and passenger trains from West down.

Feb. 11th, Friday

The Eastern freight run by the Engine "Bristol"—this day—the "Massachusetts" laid up in ordinary with a loose wheel or tire. Eastern Passenger, Western freight and Western Passenger trains in season and the same.

Mr. Tilton, the Western freight conductor, reports the engine "Michigan" as having run off the track yesterday near Chapman's on her trip to Greenbush—got on again and was reported by Mr. Adams as being in readiness at Greenbush for active service again when he left Greenbush at 1 o'clock this day.

All trains in season except the East freight—3 hours behind time, heavy train with the engine "Bristol."

Feb. 12th, Saturday

The Eastern trains regular. The Western morning trains regular. The Evening Passenger and freight trains late, delay caused by the breaking down of a bridge on the H & B R. R., a few miles east of Chatham Station, over which was passing at the time the Engine "Michigan", attached to the Western freight train for Pittsfield—the Engine fell through into a creek, with one or two freight cars attached and remained—by this accident no passing of the bridge with trains occurred until the 16th—when the trains passed over again.

Feb. 17th, Thursday

Trains left in season—morning of this day snow flying thick and wind very high. Train from the east $\frac{3}{4}$ of an hour behind time. Western train 1 hr. and 40 minutes behind time on arriving—detained by snow and wind.

The P. M. Passenger train for Greenbush started with one engine from Springfield at 2:26 P. M., arrived at Pittsfield 7:30 P. M., 5 hours for trip—detained by getting set with the engine on account of snow.

The Eastern train from Boston late 25 minutes—delayed coming over B & W R. R. The Eastern freight train 3 hrs., 35 minutes late, lost time waiting for other delayed trains.

The Western freight A. M. for Greenbush arrived at Pittsfield about 11 A. M., following the morning Passenger train in—waited at Pittsfield until the train from the west got to Pittsfield—which train consisting of 4 cars, drawn by the Engine "Stockbridge" arrived at Pittsfield about 7 P. M. The freight train arrived at Springfield at 2:10 minutes A. M. of the 18th.

The P. M. Western Passenger train from Greenbush arrived at Springfield at 3 A. M. of the 18th having been detained by the Engine "Michigan" getting off the track a short distance west of Chapman's depot, while on its way to Chatham.

The Engine "Worcester" came down with the Western Passenger train, the "Franklin" the regular engine for the train having been left at Pittsfield off the turn table track.

Feb. 21st, Monday

Eastern Freight train started with two engines, at regular time, train divided—the Engine "Bristol" proceeded first with the heaviest portion of the train and arrived safe at Palmer and waited to unload freight on the main track before the Engine "Berkshire" arrived at Palmer. The "Berkshire" Engineman running fast and being under great headway when arriving at Palmer, came in contact with the after part of the "Bristol's" train and struck with so much force as to demolish entirely the short Passenger car attached to the train, five or six freight cars were also injured slightly and the "Berkshire" Engine had her railing on both sides knocked off and bow timber stove—the "Berkshire" came back to Springfield and the "Bristol" proceeded on. The trains the remaining part of the day have run with safety and arrived with regularity.

Mar. 1st, Tuesday

The new Engine "Rhode Island" left with the Eastern freight—other trains punctual in starting and arriving, nothing material occurred this day.

March 21st, Monday

An accident to the "Ohio", Western freight Engine, when about two miles above Westfield, going up—the outer pieces of castings at the head of the engine broke and occasioned the breaking of the gears forward. Mr. Horton, the Conductor, sent word to Springfield and the "New York" was sent to relieve the "Ohio" and take her train west. The "Ohio" was towed in by the "Middlesex" in the afternoon.

The morning Passenger train from the west late $\frac{3}{4}$ hour in consequence of this injury to the freight engine. Eastern Passenger train down late 15 minutes—same cause.

The P. M. Passenger train for Greenbush, when about 2 miles east of Chester Village depot, was detained by the new Engine "Barnstable" running off the track. The Engineman (Perry) had a limb broken and the engine and tender were upset and remained alongside the track. An

extra engine was sent to the train from Springfield and took the train west—the Baggage Car was badly injured. The trains were late on arriving at night.

March 31st, Thursday

The Bridge east of Chester Village depot, having been found defective, after the noon passenger train for Greenbush had passed over it, it was deemed advisable by the Engineer of the Road, not to have any other train cross the same, until it should have been strengthened by shoring. The freight train down, therefore was ordered to remain at Chester Factory Station and harbour for the night; the Engine "Essex" was sent from Springfield to the bridge with cars and awaited the arrival on the other side of the Afternoon Passenger train from Greenbush—the Passenger train was of course detained and the passengers arrived at Springfield at 9:30 P. M. The Engine "Massachusetts" instead of proceeding as usual on her trip East, went as far as Westfield and there met the Western freight, which had come over the bridge by single cars and arrived at Springfield at 10:30 A. M. On April 1st, the freight left Springfield for Worcester at 10:50 A. M. with 35 loaded cars and arrived back to Chester at night at 11:10 P. M.

April 9th, Saturday

From this time to the 14th, nothing material has occurred—the trains have all run regular and in time. On this latter day, the Engine "Michigan", running the Eastern freight, having as a train 52 cars, broke her connecting rod strap, a little east of Palmer Depot when returning to Springfield, which occasioned a delay in her arrival. Came in with part of the cars and arrived at 8:30 P. M. The "Rhode Island" was run as far as Palmer for the remainder of the train and arrived at 11 P. M.

April 15th, Friday

The Trains all started regular—the Eastern Freight with the Engine "Illinois" and 57 cars as a train: proceeded without any material occurrence until arriving near Warren Depot, when starting suddenly, the cogs to the spur wheel of the Engine were broken, which made it necessary to leave part of the train at Warren—25 cars were accordingly left—the "Illinois" proceeded to Worcester with the remainder of the train and arrived safely. Having wooded, watered, etc. (nothing said about repairs but we assume they were made), came out of Worcester at the usual hour with 51 cars attached and when off New Worcester, proceeding at her regular rate of running, one of the connecting rods broke near the head of same, which stove one cylinder to pieces and made it necessary to return to Worcester where she remained with her train. Soon after her return the Engine "Massachusetts" arrived with the 25 cars left at Warren, said latter Engine having been sent as an extra from

Springfield, after having heard of the first failure of the "Illinois". The "Massachusetts" came through safely with the freight arriving at Springfield at 11:45 P. M.—the "Illinois" was left at Worcester.

This day also occurred an accident to the Engine "Norfolk" attached to a train of wood cars coming from Palmer to Springfield, which tore the railing off the engine on both sides and damaged the engine forward and sub-treasury box—said damage caused by the engine running into a dirt car on the track, employed in repairing the road at Stevers's cut.

May 16th, Monday

Passenger and Freight trains East and West punctual with exception of evening Passenger train from Greenbush—late 2½ hours—detained at Chatham in consequence of track being obstructed—said obstruction caused by a collision of the Engine "Ohio" with the freight train and the "Essex" engine with an extra train of cars—carelessness on the part of Tucker, the "Essex" Engineman—no material damage to trains.

July 9th, Saturday

The Morning passenger train due at Springfield at 11:45 A. M. did not arrive this day until 12:40 P. M., detained on the road between Chatham and Pittsfield by the "Chatham" engine not working well.

The Western freight late 33 minutes in consequence of heavy freight train from Greenbush—brought no freight from any place west of Pittsfield—left the greater portion of this day's freight at Chatham.

The Eastern freight train left Springfield in season—the Engine "Massachusetts" gave out on her trip to Worcester when near Brimfield turn-out, in consequence of one of the connecting rod straps breaking—the Conductor of said train having left his freight at Warren, returned with his disabled engine and at 10:45 started again with the Engine "Illinois." The "Illinois" went to Worcester safely with the train and on her return trip, having come over the Charlton grade, with a train of 45 cars, while descending between East and South Brookfield, the connecting rod on one side of the engine broke and stove the cylinder head—disabling her for further use—said engine arrived at Springfield at 12:30 A. M. Sunday. On Sunday morning the engine "New York" was sent to South Brookfield and returned safely.

The Engine "Plymouth" with the evening passenger train from Worcester, 40 minutes late in consequence of the rocker shaft of said engine having got turned and bent—delayed in clearing away one side of the gearing so that the engine could run in with one cylinder.

Nov. 1st, Tuesday.

The first train for the East leaves here at 6 A. M., the second at 1 P. M. Mr. Barnes and myself went to Worcester, arriving punctually at all the Depots. The morning train from Boston did not arrive until 45 past 9, making the departure of the "Middlesex" 24 minutes late.

As the "Middlesex" was going, the Engineer saw the Norwich Train going out at the same time and heard the Whistle, but from some unaccountable inattention to orders, did not stop his engine entirely, so that when the Norwich Train came up, the "Middlesex" struck the hindmost passenger car, being just at that moment upon the frog of the track, was carried off in a parallel line, about two rods. The Norwich Train did not sustain any damage and went directly on. In a few minutes our passenger car was removed and after a detention of an hour and a half, from this accident, the "Plymouth" left at 30 past 11, making two hours detention in Worcester. At half past 2 P. M., the Engine and Tender were removed and the road repaired. This is the most astonishing accident that ever happened on this road. If an engine had been going full speed it must have gone directly through the Norwich cars and inevitably killed several persons. We detained the freight cars in order to avoid any collision with the second passenger train from Springfield 'til after the arrival of the latter which was at 5 P. M. instead of 3:45.

The "New York" left Worcester at 5:05 with 39 cars accompanied by the "Massachusetts" with 23 Merchandise cars and a passenger car. Both trains arrived at Springfield at 11:15 minutes (P. M.)

Nov. 2nd, Wednesday

The "Rhode Island" left with 31 merchandise cars at 5:30 A. M. The passenger train for the east with the "Plymouth" left at 6:05 A. M. The "Norfolk", Dayton, Engineer; Adams, Conductor left with passenger train for the west. The "Indiana" left with 21 freight cars at 6:55 A. M. The "New York" and "Massachusetts" left with 40 cars of merchandise at 2:04 P. M. and the "Barnstable" with the mail for the east.

Adopted the rule this day, that when either the passenger or freight trains approach the crossings at Worcester, of the Norwich track, or the crossing at Chatham, the Engineer is to blow his Whistle and when the train has arrived, the Conductor is to stop and get off the train and give the signal for passing. Gave this day written copy of the above order to A. H. Moore, Henry Tilton, John B. Adams and Capt. Stoddard.

The "Barnstable" arrived, Mr. Moore Conductor at 12:30 P. M., being detained 15 minutes on Boston road. Left precisely at one P. M. for Boston.

Mr. Tilton, "Bristol", arrived at 12, left ½ past 12 for the west.

The "Massachusetts" with 27 merchandise cars, Chapin Conductor and "New York", Capt. Stoddard, with 25 merchandise cars, arrived safely with the Engine "Middlesex" which was injured yesterday at Worcester, at 6 P. M.

The "Norfolk", Dayton Engineman, Adams Conductor, arrived from the west at 6:30 P. M.

The "Rhode Island", Wallace Conductor, arrived with 54 merchandise cars at 7 o'clock P. M.

The Engine "New York" left with 27 cars of merchandise and passenger train at 9:30, Chapin Conductor, in place of Capt. Stoddard who remained to rest.

This closes the recital of "why the trains ran late." Perhaps it is a wonder that they ran at all. In selecting these items my sole purpose was to show the hazards and the difficulties attending same. Not all days were like these—the records show many a day during that first year in which the trains departed with regularity and punctuality. The railroad and its operation was new, it lacked sufficient motive power to handle the business, without the telegraph the schedule of the whole single track line could easily be disarranged. It was a hard life—long hours, below freezing temperatures with plenty of snow in those mountains in the winter but the men stuck and became the pioneers in the effort to connect Boston with the great mid-west.

Chapter X

LOOSE THREADS

In the preceding chapters we have outlined the building of the Western R. R. and we have outlined some of its early motive power and its troubles in operation. We will now try and gather some of these strands and proceed with our story.

The first change was the resignation of Mr. Thomas B. Wales as president in February, 1842. Mr. Wales had guided the company from the start and now that the worst of the obstacles were removed, he felt that he could safely let his duties devolve upon others. He was succeeded by Mr. George Bliss, the former General Agent, a man who had given untiringly of his efforts to make a success of this enterprise. The Board voted that the duties of Agent and President should be united in one person and that he should give his whole time to these duties. In June, 1842, Major Whistler, the Engineer and Superintendent, resigned to go to Russia and these duties were added to the others of Mr. Bliss. Thus, upon one individual was concentrated the duties of four distinct lines of work. The President was the only executive officer with local masters of transportation at Springfield and Pittsfield. Although we may be a bit critical of the Board at this juncture, we must remind the reader that with the road completed, its operation could be performed with far less men, but with how many less men and in what capacity, the untried Board did not know. Mr. Bliss, never in good health, finally induced the Board to appoint a Superintendent and on Sept. 29, 1842, James Barnes, then acting as master of transportation, was chosen Engineer, and as such he assumed certain duties of the Superintendent, relinquished by Mr. Bliss. On April 7, 1843, the title of this office was changed to that of Superintendent.

One of the first problems that confronted the Board and the officers was the matter of fares. Although a discussion of this subject has been reserved for another chapter where the situation can be stated in its entirety, brief mention will be made here. The first class passenger fare between Albany and Boston which had been \$5.00 was reduced to \$4.00. The Boston & Worcester declined to accept a pro rata reduction but they did consent to accept \$1.00 in place of the \$1.25 which they had received. The reduction was made not without considerable opposition on the part of some of the Board members. The increase in passenger receipts were so small that the former fare was restored on Dec. 1, 1843. The Board also learned that more revenue was to be derived from the transportation of merchandise than from passengers.

But let us continue with the minutes of the Board and trace the early operation of this enterprise. On March 29th, 1842, a Committee was appointed by the Board for the purpose of making arrangements with the Boston & Worcester R. R. that the freight cars of the Western R. R. would not be diverted and used on the lateral roads. We also find that they ordered that the "Conductors, Depot Masters, clerks and others employed by the Corporation shall use none other than the most courte-

ous language to those with whom they have intercourse upon the road in the discharge of their duties and that any violation of the letter or the spirit of such order shall be considered sufficient grounds for the removal of him who may violate it."

On Oct. 21, 1842, Mr. Joseph G. Moody was appointed Master of Transportation and stationed at Springfield. It was at this meeting that the Committee reported on the entire cost of the road from Worcester to the State Line at New York. The day following one locomotive of the largest class was ordered from Messrs. Hinkley & Drury and one from William Norris.

At the meeting on Nov. 29th, the president was authorized to make arrangements with the Boston & Worcester R. R. for the supply of merchandise cars for the two roads for the following year. The Superintendent was authorized to investigate in the matter of ventilation of passenger cars, of using Babbit's oil boxes on passenger cars and placing the new long passenger cars on the morning trains from Greenbush and Boston. The president was authorized to make arrangements for the transportation of passengers between Boston and New York via New Haven or Bridgeport and with the Housatonic R. R. for the interchange of passengers at State Line.

On Feb. 1, 1843 we find the Western R. R. making arrangements to carry the mails between Albany and New York when the Hudson river is closed with ice and, Mr. J. W. Fairfield, President of the Hudson & Berkshire R. R., has requested the Western R. R., to either replace the rails broken by their trains or pay \$6000. damages for same.

At the Apr. 19th meeting, the superintendent, James Barnes, was authorized to purchase immediately two passenger engines of 15 tons weight, each, from Hinkley & Drury. The day following the Board recommended that the superintendent have authority to issue free tickets or passes and to make a monthly report to the Board on the number issued, other than officers and men going over the road on the business of the Corporation.

On May 31st of this year the Board authorized the superintendent to erect such fences as were necessary to protect the road against snow. Mr. S. W. Thompson of Springfield requested the transfer of the express contract with Harden & Co. to himself since he had purchased the business. The Board authorized the superintendent to make arrangements with the Boston & Worcester R. R. so that passengers may stop over at any way station for a period of not over 24 hours.

From one S. Clarke of Albany came a proposal for the transportation of loaded canal boats between Albany and Boston. The idea was evidently similar to that used on the Portage R. R. of Pennsylvania, but the Board, at their meeting on Nov. 15, 1843 declined to consider it seriously. The superintendent was authorized to prepare a report at the end of the year for the cost of merchandise transportation as against that of passenger. He was also authorized to purchase a new freight engine, not to exceed \$27000. and to exchange the "Boston" for a machine that weighed less on the drivers.

At the meeting held on Jan. 12, 1844, the Board declined to lease the New Haven & Northampton Canal Co. A committee was appointed to take up with the Massachusetts Legislature the terms and conditions upon which the Western R. R. may enter and use the Boston & Worcester R. R. Also, if the morning train from Greenbush should be delayed, the afternoon train from Springfield to Boston will not wait after 3 P. M. and a special train will be made up to forward the passengers from the delayed train.

On March 2nd, 100 additional merchandise cars were purchased for the joint business. A contract was made with Harnden & Co. respecting the transportation of emigrant passengers over the road. On the 21st, the Board ordered "that no express trains whose running is uncertain shall be allowed on the road." The day following the Board ordered arrangements to be made to ticket passengers between New York and any point on the Western R. R. either via Albany or via New Haven.

At the June 5th meeting, the Board ordered that the lot numbered *one*, accompanying the report of the president, at the corner of Broadway and Steuben Streets be purchased for not over \$4500. on behalf of the A. & W. S. R. R., for a depot in the city of Albany. Three months later the superintendent was authorized to lay a track east of the railroad bridge at Greenbush and across the land of the A. & W. S. R. R., to connect with the Troy & Greenbush R. R.

At the Jan. 22nd 1845 meeting, there was considered an application received from one A. Phelps, Jr. and 35 other members of the Legislature of Massachusetts, for a reduction of fares charged to the members of the Legislature. At this time, of the nine Directors, four were elected by the Massachusetts Legislature and five by the stockholders. In this way did the "Bay State" guard its investment in this enterprise. Well, to quote the Board—"any member of the Legislature may receive tickets to pass and repass on the W. R. R., during the present session for the price of one ticket." Which means, that the Legislators virtually received a half rate ticket.

On July 10th a committee was appointed to have under consideration aid to the Pittsfield & North Adams R. R., and ordered that a survey be made from North Adams to Bennington, Vt. More will be said of this road later. On July 21st, the Board accepted the offer of one S. Butterfield to establish a line of the magnetic telegraph along the line of the W. R. R. The clerk at Springfield was ordered to give his entire time to the sale of tickets over the three roads entering that city.

At the meeting on Oct. 8th, the erection of a freight depot at Springfield, for the joint use of the three roads was authorized. A Night freight train between Greenbush and Boston was authorized to be placed in service and additional freight engines and platform cars were ordered.

A month later, Nov. 12th to be exact, the Treasurer of the Pittsfield & North Adams R. R. reported he had received \$31,000.00 which was the amount required by the Western R. R. that he raise, and instructions were given to procure land in the name of the P. & N. A. R. R. and to put the road under contract for construction.

The year closed with a collision between two trains and on January 13th, 1846, the Board ordered—"No freight train shall leave a station immediately preceding a station where a passenger train is expected to pass, unless it has at least ten minutes more than its full running time as specified in the Time Table."

On Jan. 29th, President Bliss suggested to the Board that the road have its own depot in Boston and that they apply to the Legislature for authority to locate and construct a branch track or tracks from some point on the Boston & Worcester R. R. to connect with same. The Board ordered 200 tons of rails to be imported from England.

Trivial events these? Not to the managers of this pioneer railroad. They were going to school—the hard way and the only way they could learn was by experience. During this period the Hartford & Springfield R. R. was opened, thus giving a continuous rail line from Boston to New Haven and to New York by boat. The Troy & Greenbush R. R. was opened but most important of all, the inclined planes at either end of the Mohawk & Hudson R. R. were dispensed with and reasonably practicable grades for the locomotive were built in their place. Lastly, the Utica & Schenectady R. R. was authorized to carry freight during the suspension of navigation on the Erie Canal. That was the only road between Albany and Buffalo which, prior to this time, was forbidden to carry freight. And lastly, in 1845 witnessed the opening of the railroad between Springfield and Northampton, Mass.

On the 3rd of January, 1846, just ten years from the organization of the Western R. R., President Bliss notified the stockholders that ill health prevented any further continuance of duties with the Western R. R. During these ten years he had given his entire time to this corporation—six of them in the capacity as General Agent while the road was under construction and, save for 1843 when he was a director only, he served as president. To Captain William H. Swift and Major George W. Whistler the road owes much in their selection of the route and its construction but to the disbursement of nearly eight millions of dollars, no small sum in these times, without any trace of scandal, for the building and the equipping of this road, the road is indebted also to George Bliss, the General Agent.

Chapter XI

ADDISON GILMORE AND CHESTER W. CHAPIN

With the first two years of operation behind it, the Directors became aware of a number of things. Locomotives and cars, rails and ties, everything sooner or later wear out. The rapid increase in traffic was the immediate need of more equipment and heavier locomotives. Furthermore, profits did not increase in the same ratio as did the traffic and lastly, an overburdened official, in order to do his work to the best advantage, must have adequate assistance.

Addison Gilmore, the successor of George Bliss, knew all these details. He drove a hard bargain with the Directors—\$5000. per annum against the mere pittance George Bliss received, yet it was fortunate that his services were secured. He was elected a Director on February 13th, 1846 and on the 17th, he was chosen president. In the two short months that followed, an agreement was reached with the Boston & Worcester R. R. relative to the division of rates; 200 tons of T rails were ordered from Messrs. Thompson & Forman of London @ £12 per ton; an express train was placed in night service in each direction between Greenbush and Boston—fare \$3.00, the regular fare was \$5.00. Four new locomotives were contracted from Hinkley & Drury and 100 freight cars, 2 first class coaches, four second class coaches and two post office cars were contracted with Bradley & Rice of Worcester. Addison Gilmore was starting to put the road on its feet.

Let us consider for a moment the North Adams branch—incorporated as the Pittsfield & North Adams R. R. by an act of March 3, 1842, revised on March 18, 1845. By the autumn of 1845 the requisite sums had been raised and the road located and placed under contract. It extended from a junction with the Western R. R. two miles east of Pittsfield to North Adams, Massachusetts, a distance of 18½ miles. The contract between the two companies provided the Western R. R. was to build the road with funds provided by the Pittsfield & North Adams R. R., the Western R. R. to lease and operate it under a contract for thirty years, paying a rent of six per cent annually on the cost, payable semi-annually. At the end of thirty years, the Western agreed either to buy the road at cost or take a new lease for ninety-nine years at five per cent., payable semi-annually. The capital on which the six per cent. rent was paid, was \$450,000.00. The road was opened for business in the fall of 1846. Although the P. & N. A. maintained a separate organization and owned its equipment, it was under the direction of Mr. Wm. H. Powers, the Western R. R. official at Pittsfield. Deficits were made up through a guaranty fund and when this fund became exhausted, by the Western R. R.

Although the Directors considered and were invited to extend their road to other Massachusetts towns, the one to North Adams was the only one built. Southbridge wanted the Western R. R. and the branch would not have been difficult to build. Southbridge at that time was divided between the west end and the east end. Both parties wanted the depot in their section. When the citizens were called upon to vote money to

aid in the construction of the road, the proprietors of the Globe mills instructed and had prepared ballots marked "No!" Everyone in Southbridge expected a compromise but on June 11th, 1846, the Directors deemed it inexpedient to build the branch and Southbridge went without a railroad until the Boston, Hartford & Erie R. R. was built. Barre, Massachusetts wanted the Western R. R. to build to that town—here again the Directors refused. In the light of later events, of the two proposed and one constructed, had the Southbridge branch been built in place of the North Adams, it probably would have been a paying proposition from the outset and to date. Southbridge was a manufacturing town then and has since grown and all of its products could have been shipped directly east or west over the Western R. R.

The year 1847 was another busy one—the Directors authorized the double tracking of the road between Worcester and Springfield on those portions not already double tracked; also between the junction of the P. & N. A. road and the Western R. R., to Hinsdale. 6000 tons of steel rails were ordered, some were rolled by the Tremont Iron Works, whose rolling mills were located at Tremont, Massachusetts, almost on Cape Cod. 50,000 spruce ties were ordered—to be kyanized. Ten more engines were ordered from Messrs. Hinkley & Drury and on June 17th of this year, the sale of the light Lowell and the Winans engines were authorized. I have hunted through the records to see if it is possible to learn their disposition. The Lowell engines were far from worn out—they were too light for the road. Time and again one encounters some of these engines in service on other roads, not only in New England but in the mid-west—"purchased second hand." A change of name hides their identity and we will probably never learn where they went. As for the Winans engines, my private opinion is that no one wanted them and they were scrapped by the road. The Directors authorized the purchase of 150 more double truck freight cars and a new steamboat for the ferry at Greenbush was authorized. And to do all this, the road petitioned the Legislature to increase its capitalization by three millions of dollars, proceeds of which were to be used for the above.

Early in 1848, the Honorable Josiah Quincy, Jr., presented his resignation as Treasurer. From the start of this enterprise and for twelve years, Mr. Quincy had carried on faithfully and efficiently as the Directors stated in their testimonial. Stephen Fairbanks of Boston was elected to succeed him and Ansel Phelps, Jr. of Springfield was appointed Solicitor. Another change came in the resignation of Amos Barnes, Superintendent, to take effect August 1st. Mr. Henry Gray was appointed to succeed him.

The early cash books of the Western R. R. show a laxity in the handling of their funds. One of the duties of the General Agent was to collect the funds from the agents at the several stations and to deposit them with the Treasurer. Furthermore, he was empowered to make certain payments. With George Bliss as General Agent and while the road was in its infancy, this may have been all right. Certainly there was nothing but scrupulous honesty on his part as long as he was connected

with the road. The books of the Treasurer would show that on a certain date he received a sum of money—sometimes a few hundred, sometimes several thousand dollars. Undoubtedly a memorandum listed these receipts accompanied each entry but the system, at best, gave too many opportunities for peculation. In February, 1850, the accounts of the Cashier and Book-keeper at Springfield were found to be in great confusion. Subsequent investigation by an outside auditor found the books to be correct, but between December 1, 1847 and the date of the investigation, there was a shortage of cash of \$68,354.98. This was reduced to around \$50,000.00 from the sale of the personal property of the Cashier—Addison Ware. Mr. Ware received his appointment in 1839, was highly regarded and respected by all concerned, yet the temptation proved to be too much for him and a wholly inadequate system of accounting permitted him to make these peculations. Again, the books at the Albany station were examined and here was found a shortage of \$10,667.29 caused chiefly from neglect in making prompt settlements. After this an Auditor of Accounts was appointed who supervised the collecting of all sums and the auditing of all accounts including those of the station agents.

The close of 1850 witnessed the death of Addison Gilmore, a man in the four years that he was President did much to improve the property and place the road upon a firm foundation. Prior to his death he prepared a statement relative to the property and this paper was found amongst those of the road. It is so interesting that it has been produced elsewhere in this bulletin. Mr. John Gardner, one of the Directors, was elected to succeed him temporarily and at the annual election held in February, 1851, Captain William H. Swift was chosen President.

March 17th, 1851 witnessed the burning of the station at Springfield, caused by an overheated stovepipe in the restaurant. The building had become outmoded and was replaced that summer by a brick structure, four hundred feet by one hundred thirteen, walls twenty-five feet high, iron doors, window frames and sashes, a building capable of handling the business of the Western and the Hartford & New Haven and Connecticut River roads at a stipulated rental.

January 19th, 1852 marked the completion of the New York & Harlem R. R. to Chatham Four Corners. An arrangement was made between the two roads in that the New York & Harlem would furnish the equipment, the Western R. R. would furnish the locomotives and crews between Chatham Four Corners and Greenbush, thus making a continuous inland route between Albany and New York City. This subsequently made the single track of the Western R. R., between those two places, a busy stretch of track—in 1855 the report shows they were operating from twenty-five to thirty trains in each direction daily and the need became imperative for its double tracking throughout, or at least portions of it.

On November 21st, 1854, the Western R. R. purchased the Hudson & Berkshire R. R. from the State of New York. The purchase was made for self protection and it was necessary. That portion of the line be-

tween Chatham Four Corners and the State Line was located in part upon the lands owned by the Hudson & Berkshire and the Albany & West Stockbridge, the latter leased by the Western R. R. The releases for this land, promised by the Hudson & Berkshire, had not been forthcoming and the matter was not pressed because it was assumed that conditions were all right on the H & B. Just the same, the H & B early in 1854 failed to pay either principal or interest on their mortgages to the State of New York and the road was put up for sale. Interests in New York City were always hostile to the Western R. R. and here was a chance to ham-string this enterprise, at least temporarily, by the purchase of this road. The Western R. R. paid \$273,131.18 for the Hudson & Berkshire, reorganized it as the Hudson & Boston and lost no time in acquiring property rights to the land they formerly did not own between State Line and Chatham Four Corners.

But our Directors were learning that the shortest route between the great mid-west and Boston does not possess all of the advantages. It had competitors in the shape of the Erie and the sound steamers to the south and on the north were the Vermont Central and Ogdensburg and the Rutland & Burlington, all competing at unremunerative and ruinous rates. "More work was done in 1852 than in 1851 and less money received for it"—adequately tells the story. Just the same, the year following, 1853, the Western R. R. agreed to furnish the cars for the joint business with the Boston & Worcester and more had to be ordered.

Captain Swift declined re-election as president at the annual meeting in January, 1854 and Chester W. Chapin of Springfield was elected to succeed him. Mr. Chapin was an able and capable executive. As early as 1830 he had a line of steamers between Hartford and Springfield and later his interests led him to the Sound. He was elected a Director of the Western R. R. in 1850 but soon resigned to accept the presidency of the Connecticut River R. R. One of the first needs that he recognized was the construction of a bridge across the Hudson river at Albany. On April 9th, 1856, the State of New York chartered the North River Bridge Co., to span the river at Albany, the Albany & West Stockbridge R. R. was authorized to subscribe to the extent of 1008 shares, the balance (3992) was held by the New York Central & Hudson River R. R. Co. Measures were taken to have the bridge completed. 1857. Unfortunately there were many delays and it was not opened until March 1st, 1866.

All during the Chapin regime the property was steadily improved—not easy through the panic of 1857 and the Civil War years. Double tracking the road was steadily followed as fast as money permitted. At the close of 1858, 29 of the 39 miles of the Albany & West Stockbridge R. R. was newly double tracked and east of the Connecticut river there were 44 miles of new double track. At the time of the consolidation, Sept. 4, 1867, all but six miles in the mountains had been double tracked. But there was more than this, under the capable direction of Wilson Eddy, some famous engines were being built in the Springfield Shops. Freight equipment was built at these shops as needed but the chief difficulty was the everlasting bickering, the disagreements and the disputes that arose between it and the Boston & Worcester R. R. as to

the division of rates and fares between the two roads. This dispute finally climaxed in the consolidation of the two companies, proposed nearly twenty years earlier as a means for their settlement, but stubbornly refused by the Directors of the Boston & Worcester R. R. And lastly, Ellis Gray Loring, the first Clerk of the corporation, the man who faithfully kept and transcribed its records in his clear penmanship, died in 1858, to be succeeded by Ansel Phelps, Jr.

Previous to his death, the late President of the Western Rail-Road Corporation, Addison Gilmore, prepared for publication the following communication to its stockholders. It was found among his papers and perhaps it tells better of the improvements made under his regime than any statements the author might make.

"It was about the middle of January, 1846, when I was called upon, and invited to take the Presidency of the Western Railroad. A vexatious suit with the Boston and Worcester Road was then pending before the Supreme Court, and many other difficult questions remained unadjusted. The stock was selling at 85 per cent. in the market, that of the Boston and Worcester Road at 14 per cent. advance, the Boston and Maine at 11 per cent. advance, the Concord at 34½ per cent. advance, the Fitchburg at 20 per cent. advance, and the Old Colony at 6 per cent. advance. The supply of Engines and Cars on the Road was entirely inadequate in numbers and capacity to do its business, and that of tools in the machine-shops meagre and insufficient for making the repairs often necessary to its machinery. The road was but scantily provided with land and depot accommodations at many important points, and was destitute of a reliable supply of pure water for the use of its Engines. The sleepers and wooden structures, along the whole line of the Road, were much decayed, and nothing had been placed in reserve to meet depreciation.

"Under such circumstances, which were then partially known to me, I had no desire to become the President of the Western Rail Road, and promptly declined the invitation. In this case, however, I was persuaded more easily than usual, to comply with the wishes of others, rather than to follow the course dictated by my own judgment, and I at last consented to the use of my name at the Stockholders' meeting, with a view of becoming President if elected.

"On the 13th of February, 1846, I was elected a Director, and at a meeting of the Directors, holden on the 17th of the same month, I was chosen President of the Western Rail-Road Corporation.

"The Directors were, at this time, fully aware of the arduous nature of the duties imposed upon the President. They passed a vote, referring all unfinished business to him, with authority to call to his aid such of the Directors as he might at any time deem expedient. They, at the same time, clothed him with all power necessary to act, conclusively, upon any and all subjects connected with the affairs of the Corporation. And as it was understood that his time would be occupied in the general business of the Road, a Committee on Accounts was appointed, in order that he might be relieved of the important duty of a personal examination of them.

"It is well known, that prior to February, 1846, the Directors of the Road had been struggling with pecuniary embarrassments, and avoided all outlay not demanded by the most imperative necessity. They trusted to an increase of business, to enable them to pursue a different course. This policy was justifiable in the existing state of their finances, although its effect has been to burden the income of subsequent years with a large amount of expenses which properly belong to that period. During the last five years, the income of the Road has increased, so that we have been able not only to meet our ordinary expenses, but to make up much of the previous depreciation, and since July 1, 1847, we have made regular semi-annual dividends of 4 per cent each. In the same time, the profits in the Sinking Funds have increased \$338,085.90. We have laid up in a Reserve Fund from earnings of \$27,000.00 and enlarged the active Contingent Fund \$120,016.00—showing a gain in all of \$475,101.90—which is $1\frac{3}{4}$ per cent per annum, or \$9 on every share of the Corporate Stock, for the five years of my connection with the Road. In the same time, \$35,000 have been expended towards new Bridges, \$25,000 for new Engines, \$36,700 for new Passenger and Freight cars, \$6,000 for new Buildings, \$6,294.32 towards the new Ferry Boat at East Albany, \$5,500 for a new Pier at the same place; in all \$114,494.32—and thirty miles of track, originally laid with rails weighing 56 lbs. to the yard, have been taken up and relaid with iron 70 lbs. to the yard; the whole, including the additional weight of the iron, having been charged to the current expenses. The Road-bed has been wonderfully improved, by the removal of bad material and the substitution of that of a better quality, and the drainage of the track has been much improved, by widening and deepening the ditches.

"In view of the past, and looking forward to the future, I can say with safety that the average amount which it will be necessary to expend upon the Road for all subsequent time, cannot exceed the amount per annum which has been charged to expenses since my connection with it. In expressing this opinion, I of course except such expenses as may be caused by an increase of business, and in that case they would bear nothing like the present relative proportion to the whole amount of gross earnings. The fact is that the Corporation has been growing rich, and has been able to charge off almost any amount to expenses and still make remunerative dividends. It has been my policy, sanctioned by the Directors, not to make a dividend greater than 4 per cent, semi-annually, but to lay up in reserve a surplus Fund fully equal to any contingency which would arise, and thus establish the fact, that the Western Rail-Road stock is as sure an 8 per cent. Stock, as that of any Rail-road can possibly be. In my opinion, if the same policy be pursued, and the Road well conducted, there can be no reasonable doubt with regard to this result, but under a different policy and bad management, it would be a very easy matter to reverse it.

"Bearing in mind the effects of the policy to which I have alluded, my first object was to ascertain the condition and wants of the Corpora-

tion, and having made up my own mind as to the course to be pursued, I communicated my views to the Directors and they fully agreed with me. My first step was to purchase land wherever the existing or prospective wants of the Corporation required it, to equip the Road with engines and cars; to enlarge and arrange the Machine Shops, for the performance of our work with economy and convenience, and to supply them with necessary and suitable tools, and to provide a perpetual supply of pure water for the use of the engines on the line of the Road. These were objects with the attainment of which the Corporation was, in my judgment, too poor to dispense. Immediate attention was consequently given to the purchase of land at Worcester, New Worcester, East, South and West Brookfield, Warren, Palmer, Springfield, Becket and Albany, and it is believed that the Corporation is now possessed of all the land which will be necessary for many years to come. The Road has been supplied with pure water at New Worcester, Palmer, Springfield, and Chester Factories, the three latter places being provided with aqueducts, which bring the water from such an elevation as to render the use of pumps unnecessary. The water at all these places is of pure quality and is supplied in quantities much greater than the wants of the Corporation require. The aqueduct at Springfield supplies our shops, offices, buildings, and tenements, and is provided with hydrants and hose, so that the water can be thrown at pleasure over our highest buildings and through the Connecticut River Bridge. This adds much to our security in case of fire. We are still inadequately supplied with water at some points, but this deficiency will be remedied at an early period. The Road has been furnished with Engines and Cars as rapidly as its increasing business demanded, and I venture the opinion, that no road in the country, is at this moment, better equipped with motive power. The Machine Shops were enlarged and in some places new ones were erected, and all fitted with machinery of the best quality and adaption to our wants.

"Next came the erection of a large Freight House at Albany, the utility of which, has been clearly shown in the development of our business. Extensive buildings were erected and improvements made at Springfield, Palmer, Brookfield, and Worcester which have added much to our facilities for doing business. Our bridges West of Connecticut River have been rebuilt for a second track, while they were originally calculated for a single one only, and elevated to secure the safety of the men passing under them while standing erect on the tops of the cars.

"Finding that the increase of business had been such as to warrant the construction of a portion of a second track without in any degree hazarding the payment of regular semi-annual dividends of 4 per cent upon the increased capital necessary for the purpose, it was determined to proceed with the work, and forty-five miles of second track have been built in a most substantial manner, and laid with rails 70 lbs. to the yard. The convenience of this addition has been felt in doing our business, but we have not received an increased income from it equal to the expenses incurred in taking care of it. Being, however, abundantly

able to build it without reducing the rate of our dividends, and knowing that it would afford greater accomodation to the public and convenience to the Corporation, it was judged expedient to proceed with its construction to the extent named above, but, in my judgment, no necessity has existed, nor can any necessity exist hereafter, for an increase of capital for second track, except such as may be caused by an increase in business which would furnish, simultaneously, the means to pay the regular dividend upon it. The capital should not be increased under any circumstances which would hazard the payment of 4 per cent semi-annually upon it, with that the Stockholders should be satisfied, and that they should feel sure of receiving. It is obvious that the prosperity of a Road depends much upon its income, and I regard the increase of business upon this Road as having much to do with the proper time for the construction of a second track over the whole line, but not as having much to do with payment of dividends. The present business is ample to enable the Company to pay 4 per cent semi-annually upon the present capital, and without an increase of business there can exist no substantial reason for such an expansion of capital as to reduce the rate of dividend.

"We hear much said at the present day about tunnel routes, Hudson River Roads, and Ogdensburg Roads. I have kept myself tolerably well informed upon these subjects, and have made up my own mind as to the effect which these and other Roads will have upon the Western. As it regards the first named, I predict that it will never be built in the lifetime of any who are now Stockholders. Some of our great grand children may live in a day when it may seem like common sense to discuss this question, but at present it seems to me wholly unnecessary for us to be alarmed. The Hudson River Road will take travel which now comes on our Road to take the Housatonic at the State Line, during the suspension of navigation on the Hudson River, but when it is understood that, in order to accommodate that business we have to run two extra passenger trains each way daily, the effects will scarcely be felt. It may be observed too, that the Hudson River Road will be likely to bring some business to the Western Road as well as to take some from it.

"As regards the assertion that the Ogdensburg route to Boston from the upper lakes is superior to the Western, I can only say that, if it is so, its superiority exists in spite of its greater comparative length. Oswego is a point on Lake Ontario, common to both lines, and which all freight coming into Lake Ontario from Lake Erie must pass, and from thence to Boston via Ogdensburg, the distance is 134 miles greater than via Albany and the Western Rail Road. I do not know a man connected with the Ogdensburg Road, who believes that that can ever be the great channel through which freight will reach Boston from the Upper Lakes, but it is unquestionably true that the Northern portion of New England will be supplied by this route, and this will have a tendency to lessen the amount wanted in Boston from which that territory has hitherto drawn its supplies. The only ground on which I have heard

it argued that the freighting business would be done between Boston and Lake Erie and the West, via the Ogdensburg Rail Road, is that the tolls on the New York canals are so high. But you can judge for yourselves, whether the State of New York will allow business to be diverted from their canals in consequence of the present high rates. My own opinion is, that the tolls will be reduced sufficiently to secure the business, and in that case, the Western Rail Road and the water communication between Albany and Buffalo will continue to be the great thoroughfares.

"A Road from Troy or Albany to Rutland, Vermont, is now progressing, and when completed will be a source of revenue to the Western Rail Road. The Harlaem Road which now terminates at Dover, is under contract and will be continued to Chatham Four-Corners, where it will connect with our Road. This will undoubtedly bring us additional business, and it is but fair to infer that the immense number of Roads now stretching themselves all over the Western country will contribute more or less to the receipts of the Western Rail-Road, and that our income will gradually increase."

The communication continues but takes on more of a personal tone and does not need to be reproduced here.

Chapter XII

THE BATTLE FOR RATES

When the Western R. R. was opened to Springfield, the Directors of the Western R. R. claimed of the Boston & Worcester R. R., that for the joint business, passing over the entire or part of these roads, that the Western R. R. should be favored in the division of the receipts. At that time the fare between Boston and Worcester was \$1.50. The through fare between Boston and Springfield was fixed at \$3.75 and divided, \$2.50 to the Western and \$1.25 to the Worcester Company; the latter did concede 1/6 reduction of their local fare to the Western. No similar arrangement was made in the matter of freight. From April 1, 1840 to January 1, 1844, the through fare between Boston and Springfield was reduced to \$3.00, of which \$1.25 went to the Worcester Co., the balance going to the Western Co., the latter bearing the whole reduction.

By the time the Western was opened to Albany the officers and directors of the Western Co. had learned something of the expenses of operation. It was their claim that the Worcester Company should transport the joint passengers and freight at rates much reduced than what they had charged for the past two or three years. They based their claims on these reasons:

1. It was the manifest intention of the Legislature by inserting in the charter of the Worcester Company, a provision, that the Legislature might authorize any other company to enter the Worcester Road, paying for the right of using same, such a rate of toll as the Legislature should proscribe.

2. That the building of the Western R. R. was, and always would be a great advantage to the Worcester Company bringing it business which it otherwise could not control and affording it the means of transporting passengers and merchandise to points inaccessible to the Worcester Company.

3. That the Western R. R. was a large wholesale customer, bringing passengers and merchandise in masses, gathering them in retail from a variety of sources, many of which came from sources where there was active competition to divert it to other channels and requiring vigilance, expense and effort to control it. Furthermore, it takes passengers and merchandise from the Worcester Company in masses and delivers them in retail at their numerous points of destination.

4. That it was a much more difficult, hazardous and expensive road to operate than the Worcester Company, with mountain grades of seventy-six to eighty-three feet per mile, an expensive ferry and ferry boat to maintain at Albany and the costly bridge across the Connecticut river at Springfield. The experience gained in 1842 and 1843 not only confirmed the Directors that their claim was a sound one but they deemed that it was vitally important to them that whatever was allowed to the Worcester Company for the Western R. R. business, it should be a fixed sum per passenger or per ton of merchandise, leaving to the Western Company the right to fix the aggregate amount for both roads,

with the liberty of raising or reducing the rates as business might require but in no case varying the sum paid to the Worcester Company.

The Worcester Company resisted all of these claims and on December 11, 1843, the Western R. R. Directors made formal demand on the Worcester Company for proper allowance. Upon application to the Legislature, for relief by the Western R. R., both parties agreed on January 31st, 1844 that it should be referred to Linus Child of Southbridge, John M. Williams of Taunton and Charles H. Warren of New Bedford and that their award was to be binding from one year dating January 1, 1844. The arbitrators made their award on May 21st, 1844 and they adopted the principle that the Worcester Company should be paid all expenses they were subject to, in the transportation of freight to and from the Western Road; and that in estimating these expenses, all freight on the Worcester road, no matter its source, should bear its proportion of all freight expenses on that road, plus a fair and reasonable profit upon this portion of their business. Accordingly, they awarded that for all freight brought from or carried to the Western Road, the Worcester Company was entitled to receive two and seven-eighths of a cent per ton for each mile transported on their road—this to include depot accommodations, loading and unloading—each company to supply motive power on its own road and each its proportion of cars and attendants, according to the number of miles on each road each ton of freight is transported; and each subject to all expenses and to assume all risks on its own road. This sum was fixed with reference to the existing tariff, but if the Western R. R. increased its rates, the Worcester Company would its proportionate increase. The arbitrators adopted the same principle for passengers, the Western Company to pay the Worcester Co. $2\frac{1}{2}$ c per mile for each first class passenger brought to or taken from the Worcester Company. Under this award the Worcester Company received from the Western R. R. \$1.10 for each passenger and \$1.26 per ton of merchandise passing the whole length of the Worcester Road.

At the time of this award, the local fare on the Worcester Road was \$1.50, but, towards the end of the year, during which the award was to apply, the Worcester Road reduced it to \$1.25, thus making it to the interest of the through passenger to buy a separate ticket on each road and thus destroy the evidence of their going from one road to the other and the Western R. R., of course, lost the benefit of the award. The Western Road then reduced the fares on all first class passengers twenty-five cents and applied to the Worcester Road for a proportionate reduction upon $2\frac{1}{2}$ c per mile to be paid them under the award. The Worcester Road declined and, on January 15th, 1845 served notice of their intention to terminate the award and to make a new proposition to the Western.

The new proposition was so nearly allied to the principle of a division pro rata per mile and was so complicated and uncertain that it was declined by the Western and afterwards by the Board. It professed to give each company an equal profit per mile on the joint business.

In order to determine this profit, the expenses of each in doing its whole business for the year plus the annual interest of each on the cost of its road should be ascertained. The passenger expenses and half the annual interest of each to be divided by the number of passengers carried one mile—the merchandise expenses and half the interest to be divided by the number of tons of freight carried one mile and the difference between these results thus obtained should be the difference in the rate per mile, to be established on the two roads for the joint business.

The Directors of the Western Road objected on the grounds that it prescribed a very uncertain and fluctuating standard varying from year to year according to the charges and expenses of each company. The expense accounts of both companies might be based on different principles and that each company, being interested in the expense of the other, there would be unavoidable disputes in determining them and in applying the rules for making them up, which would hinder the business. Incidentally, the expenses of the Worcester Company for 1844 were about \$1.05 per mile while those of the Western were about 63 cents.

The Western R. R. applied to the Legislature for relief and requested that an act be passed prescribing the terms under which the two companies might transact this joint business. The Legislature failed to give the specific remedy but passed a General law entitled—"An Act to regulate the use of Railroads."

The passing of this act brought forth an interesting circumstance. Under its charter, it appears that the Western R. R. thought it had the right to use the tracks of the Boston & Worcester R. R. between those two cities. It appears that Western R. R. equipment, both passenger and freight and Western R. R. locomotives were used on the Worcester Road, probably handled by Western R. R. crews. This fact, certainly throws a new light on the dispute up to this time. In the Western R. R. report for 1846 we find the statement that the Legislature forbade the use of a locomotive or other motive power on any railroad constructed by the authority of the Commonwealth, except those owned and managed by the Company owning and managing such railroad, unless by consent of such Company. The act further provided that every railroad corporation, at reasonable times and for reasonable compensation, should draw over their road, the passengers, merchandise and cars of any other railroad corporation, which has been or might be authorized by the Legislature to enter their railroad and if such parties are unable to agree upon the compensation, upon petition by either party, the Supreme Court will appoint three commissioners to fix the same and that their award shall be binding until it is revised or altered by commissioners so appointed—but, no such revision should be had within one year from the time of the award. The commissioners were authorized, upon application by either party, to fix the times at which the cars shall be drawn. A second bill was passed giving the Western R. R. the right to enter upon and use the Worcester R. R., at or near

the place of the then and present junction of the roads in Worcester, paying such rate of toll or compensation as the Legislature might prescribe or might be fixed under any general law of the Commonwealth.

It may not be amiss here to state that the charters of the earliest railroads, not only in this Commonwealth but in other states, contained this provision whereby one railroad might enter upon the tracks of a connecting line. It was based on the old turnpike idea—for the use of any that had the equipment provided they paid the necessary tolls to the turnpike company. But it was found to be inadequate as applied to a railroad with steam power and the Massachusetts statute of 1845 prevented the trains with their crews of one road from using the tracks of the other with total disregard of the trains on that road. It did not forbid the handling of through equipment with the locomotives and crews on their respective roads.

Well, as soon as the Commonwealth passed these laws, the two roads tried to iron out their difficulties. Meeting with no success, each road applied to the Supreme Court, April, 1845, and from the briefs filed by the Worcester Road, it looked like a long and expensive piece of litigation. It was in the fall of that year that certain parties proposed a consolidation of the two companies. The subject was referred to the stockholders of each company and after they had made an examination they issued a joint report unanimously recommending a consolidation. When this report was submitted to the Worcester stockholders, they virtually rejected it by postponing the whole subject indefinitely.

Near the close of 1845 the Presidents of the two companies tried to smooth out their troubles by adopting the principle of equated distances. The first proposed to assume the length of the Western R. R. as 170 miles and the Worcester 40—later this was changed to 160 and 40 respectively. But the President of the Worcester Road insisted that the depot expenses should be deducted before this division was made and Mr. Bliss of the Western did not so agree. Then the Worcester Road proposed a pro rata division on the actual lengths of the roads, on gross joint receipts, except on through business and he suggested the distances of 160 and 40 miles respectively. On the subject of deducting the depot and station expenses, he suggested that each company should deduct 12½¢ per ton, before division and that they divide the balance, 160 to 40. But the Worcester Directors declined to abandon the loading charges in addition to conceding nearly ten per cent in the length of their road.

At the Annual meeting of the Western R. R., held February 11, 1846, four of the old Directors—Messrs. Bliss, Jackson, Pratt and Austin declined re-election and Messrs. Addison Gilmore, Josiah Stickney, Stephen Fairbanks, John Howard and Jonathan Chapman were elected by the stockholders, with Messrs. Russell, Campbell, Dwight and Howland, the State Directors, forming the Board for the ensuing year.

The knowledge and talents of Addison Gilmore were soon put to test with the result of an agreement, dated Feb. 17, 1846, subsequently known as the "contract of 1846." This agreement recognized the

higher cost of the Western R. R. and its more difficult operation and that it should receive a larger share than that provided by a pro rata agreement. With the through fare between Boston and Albany set at \$5.00, the Western was to receive \$4.00, the Worcester \$1.00. Second class passenger rates were to be $\frac{2}{3}$ of the above, divided in the same proportion. The mode of collecting the fares was by the sale of tickets of each road, by the agents of each, at their local rates, to be divided as above. If it was found expedient to run a special through train, at a reduced rate, the fares were to be divided in the same proportion, but 10c would be deducted from the share of the Worcester and given to the Western R. R. Way passengers on such trains would pay the regular fares. With regards to freight, the joint merchandise was divided on a pro rata basis, according to the number of miles each parcel was transported, but, there was deducted from the share of the Worcester Road an amount equal to 12c per ton for every ton transported to or from the places west of Springfield, this amount to be added to the share of the Western R. R. The Worcester Road agreed to pay the Western Road \$2,000 per annum towards the expenses of the ferry boat between Greenbush and Albany.

Whether this contract was less advantageous to the Western R. R. than that offered by President Hale of the Worcester Road at the close of the year previous is not for us to discuss here. The new contract recognized the grades and the increase in cost of operation and the extra expense at Greenbush of the Western. That road also gave up its right to fix the maximum charges upon the Worcester Road for the joint business. The contract was to be binding for three years—for three years there was peace and harmony instead of the annual strife and bickering and Messrs. Gilmore and Hale could give their full attention to their properties. When the contract expired in 1849, it was renewed for another three years, but, the payment of the Worcester Road of \$2,000 for the ferry boat was omitted. Under Capt. Swift, it was renewed again, with some minor changes to the 12c allowance.

Towards the close of 1854, the services of Mr. F. B. Crowninshield were secured to settle some points that had arisen—his award to be final. They related to the division of receipts for the Boston—New York passenger business; the division of freight receipts on freight originating on the Pittsfield & North Adams R. R. destined to the Worcester Road and a ruling on the subject of damage or loss of goods or damages to cars. On May 12, 1855, Mr. Crowninshield, at that time President of the Boston & Lowell R. R. decided that the Boston and New York passenger receipts were to be divided on a pro rata per mile basis, or according to the distance the passenger was carried on each road—but the Worcester Company was not to receive over one dollar; that the North Adams branch question—the freight receipts were to be divided according to the distance carried on each company and on the last question, each company must be responsible for losses and damages on its own road, or if not ascertained, the losses should be borne in the same proportion in which the freight receipts would

have been divided, with provision being made for the examination of cars passing from one road to the other.

Well, the nearly ten years of peace ended in 1855. It was discovered that the freight clerks of the two companies, ever since June, 1846, had misunderstood the contract of that year and in the division of joint receipts, they had adopted a rule that gave the Worcester Road a much larger share than the Western claimed they were entitled. Unfortunately Addison Gilmore had passed away, hence it was impossible to learn what he and President Hale had intended. It seems however, that the freight clerks, instead of giving each company an equal sum per ton per mile of the gross receipts, from joint freight, had established a scale of decimals from each station, and, in making up the accounts for each month, they divided the amount received on each parcel of merchandise, to and from both roads, by these decimals, instead of dividing the gross receipts pro rata by one rule, thereby adopting as many divisions as there were stations on each road.

Again the battle flag was hung out, both sides served notice that the contract would be terminated and again Mr. Crowninshield was appealed to. The decision was in favor of the Worcester Road, and Mr. Hopkinson, being in poor health and anxious to embark for Europe, a temporary agreement was made on May 12, 1856 to hold until December of that year, to continue the then existing mode of passenger receipts and a slight revision in the division of freight receipts. When this provisional agreement expired, no new arrangements were made and the matter was still unsatisfactory to the Western R. R.

On May 30, 1857, the legislature passed an act, in addition to that of 1845, in which it provided that the obligation of two connecting roads, drawing passenger and freight cars of each, over the other, should be reciprocal; and that each should furnish depot accommodations for the other; the whole to be on such terms as the Commissioners appointed by the Supreme Court should decide.

On June 15th, 1857, the Worcester Company proposed that the two companies make joint application under the above act. The Western R. R. declined and both presented separate applications. Messrs. James W. Brooks, Holmes Hinkley and Waldo Higginson were appointed by the court and they filed their report in March of 1858. The report favored the principle of station or parcel division, as claimed by the Worcester Company. It was accepted by them but the Western Road moved the Court to set aside the award. In December, 1859, after arguments were held before that body, the Court declined to set aside the award on the grounds that it raised no questions of law for their decision; the parties had no rule of division from the expiration of the old contract, June 1, 1856 to the time the award took place, from that time to a period of one year from the taking effect of the new award, the parties were bound by the terms as no new Commission could issue one within a year. The Western Directors were so dissatisfied with the award, they offered the Worcester Road \$25,000. to vacate it, but this was declined. In August of 1860, the two companies agreed that the

accounts from June 1, 1856 to August 31, 1858, should be settled according to the provisions of the contract of November 1, 1853, as construed by the award of Mr. Crowninshield and thereafter, to November 30, 1860, according to the award of Messrs. Brooks, Hinkley and Higginson. Because of troubles within the Nation, this temporary arrangement was continued until May 31, 1862.

In their Annual Report of 1861, the Western R. R. Directors again repeat their complaint—although the contracts between the two roads profess to give the Western a higher rate than the Worcester Road, for joint freight and passengers, by the construction of the Worcester Road, that company actually receives a higher rate and they give some figures to prove their point. Furthermore, while the stockholders have no reason to complain, the aggregate prices of transportation have increased to injuriously affect the business of Boston, in competition with other cities.

This remark attracted the attention of the Board of Trade of Boston and, in 1862 they tried to adjudicate the differences. The presidents of both companies appeared and, after several interviews, agreed, on April 12, 1862, to submit their differences to Charles O. Whitmore, Nathaniel Harris, James H. Beal and Joseph S. Fay, all of Boston and George C. Richardson of Cambridge. The hearings were protracted and filled with details and on July 10, 1862, they, as referees made their award. They decided that each road should bear all expenses and be liable for all injuries and losses on its own road and where they can't be ascertained in which road they occur, the amount is to be deducted from the joint receipts before the division. That the "expense of loading, unloading, cooperage and collection charges," be offset on each road by similar services of similar nature, and, on the part of the Western Road, by charges peculiar to that road. Lastly, after deducting from the joint receipts, any losses as already provided, also expenses of agents west of Albany agreed upon by both parties, the joint freight and passenger receipts to be divided as follows:—at the end of each month, the amount of joint freight and passenger transportation by each is to be ascertained, by obtaining the number of tons and the number of passengers, carried one mile, by each, and the aggregate receipts of both therefor, shall be divided between the two, in proportion to the number of tons, and passengers carried one mile by each.

Under date of August 8th, 1862, the referees made an elaborate report to the Boston Board of Trade. The Committee stated they met the parties on seventeen days, examined forty-two annual reports, fifty-one tables of statistics, many freight and passenger tariffs, countless memorandum books, calculations of interest, heaps of pamphlets and papers; they listened to arguments, testimony and conversation, which as written out, filled 456 foolscap and ninety letter-sheet pages and all for what!!! Simply to fix the terms of the joint business from May 31, 1862 to the same date in 1863. After that, what!!! Further appeals to the Court or the Legislature and all this time great injury is being done

to the business of Boston and the Commonwealth of Massachusetts. The only remedy is a union or a consolidation of the two companies.

And finally, the exclusive privilege that the Boston & Worcester R. R. enjoyed in its charter, in that no road should be built either five miles to the north or south that would parallel it, expired on June 23rd, 1861. The Western R. R. applied to the Legislature for permission to build its own railroad from Worcester to Boston in 1863. This frightened the Worcester Directors and committees were appointed by both roads to consider a consolidation. Again the Worcester Directors dallied and, in 1866 the Western R. R. applied to the Legislature for permission to increase its capital stock by \$3,850,000. and they received the right to do so—also the right to build their line to Boston if the Worcester road did not consolidate within four months. That year, 1867, the stockholders of both companies ratified a consolidation upon the basis of a share of the new Boston & Albany R. R. stock for each share of Western or Boston & Worcester, plus a ten dollar bonus on each share of Boston & Worcester—thus, on September 4th, 1867, the Boston & Albany Railroad finally became an established fact, with President Chapin of the old Western R. R. at its head.

I have dwelt at no little length on this discussion of rates as found in the memoirs of George Bliss. They covered the entire corporate history of the road and they showed the ponderous machinery that needs must be set up each time there is a disagreement between two companies. The time the officials of both companies spent in haggling should have been devoted to the management of their respective corporations and—it hurt the development of Boston and the Commonwealth.

Why was not this consolidation arranged years ago? There seems to be several reasons. First, the city of Worcester did not want to be a way station—that city never did favor the Western R. R. as you will probably remember in its early days; then, the officers of the Boston & Worcester R. R. liked running their own railroad; also, the Boston & Worcester was prosperous and its charter protected it from another road invading its territory; the public was afraid of large monopolies and the public and the stockholders were slow to appreciate the advantage of such consolidation. The length and the size of the Western R. R. was unusual at the time of the first proposal—1845.

But the blame for this delay and for nearly all of this trouble rests squarely on the shoulders of the presidents and the directors of the Boston & Worcester R. R. They succeeded in not only defeating the wishes of the stockholders of the Western R. R., but of their own road in this matter. In 1846, when the joint committee of 1845 proposed a consolidation, it was President Nathan Hale of the Boston & Worcester that succeeded in discouraging his stockholders from such action. Again, in 1863, when another joint committee favored a union, the Boston & Worcester directors openly stated they did not agree and privately succeeded in defeating the necessary legislation. How these directors succeeded in constantly disagreeing with the majority of their stockholders and yet they continued in office was a feat in which they could

take no pride. Secure in their charter rights, they held out as long as possible, for they knew that if this consolidation took place, it would be their road that would disappear. When their charter no longer protected them and they were threatened with invasion by the Western R. R., they quickly capitulated—twenty years too late!

In closing this portion of the history of the Western R. R., I wonder if an analogous situation does not exist in our country today (1945). Since World War I various attempts to consolidate our railroads into larger systems have met with but little success—the five reasons against the consolidation of the Western and Worcester Roads are still used today. Whether this consolidation will take the form of a few major systems or one large system as proposed by Mr. Hungerford in his new book, is something the writer cannot predict. The railroads today face competition not only between themselves, but on the highway and in the air, and, to some extent, the inland waterway. The railroads, like the bundle of sticks, can be easily broken, one at a time—not so easily as in the bundle. If they are to survive these post war years there must be more genuine co-operation and less “dog in the manger” spirit than has been evidenced in the past.

Right here in the “old Bay State”—one hundred years ago, the importance of a railroad to tap the vast resources of the west was shown. With the help of the Commonwealth, that road was built and the railroad paid back every dollar they borrowed with interest. The through route was owned by two companies and the eternal bickering and fighting resulted in a direct loss to everyone in this section. The consolidation saved all this and Massachusetts has a right to feel indebted to those earlier pioneers that founded and directed this enterprise through those first difficult years.

A short time ago while in conversation with Mr. L. G. Morphy, District Engineer of the Boston & Albany R. R., I asked if there had been many changes in the original survey of the Western R. R. In the years that have intervened, blueprints have been examined, lines have been run, but because of the great cost in either eliminating some of the curvature or the grades, but few improvements can be made, without great expense, over the original survey. True, about thirty years ago there was some relocation work done in the mountains and up there, near Middlefield, will be seen along the abandoned right of way, one of the original stone arch bridges, still in good condition, just north of the present line. It represents the workmanship of a by-gone day as the big “Hudsons,” the “Berkshires” and the New York Central “Mohawks” bark up those grades of “Whistler’s Railroad.”

Chapter XIII

THE MOTIVE POWER

The earliest locomotives have already been dealt with in the chapter covering the Winans engines. As I previously stated—they were built by the Locks & Canal Co., of Lowell, Massachusetts, were of the 2-2-0 type and George W. Whistler quickly realized that more powerful locomotives must be built to surmount the grades on the western end of the road. The selection of the Winans locomotives, with their upright boilers, was unfortunate. Subsequently, Ross Winans used the horizontal boiler with success—but that did not help our Western R. R. Between the light Lowell locomotives and the defective Winans machines, the Western R. R. was badly in need of motive power. However, before closing the door on this subject, we find a note in the Directors' meeting for June 17, 1847 authorizing their sale. A memo. relative to the Winans engines leads one to believe that the boilers of some were used in stationary service, but the Lowell engines, far from being worn out, were sold to good advantage, the ultimate disposition of many, we do not know for reasons already stated, in the matter of keeping accounts. One thing more, these locomotives, as furnished by the builder, had no protection for their crews from the weather. Probably one or all had a tarpaulin protection, used by the crews to protect them from the weather. But it was on the "Middlesex" that the first cab was erected, according to a memorandum of Wilson Eddy, unfortunately the exact date is not given, but it was probably in the late forties.

To replace the light Lowell and the Winans engines, the Western R. R., placed orders with Hinkley & Drury for several, all of the 4-4-0 type, based upon the experience gained of the three Locks & Canals engines of that same wheel arrangement. These three Lowell engines must have been well built, for the first one, the "Massachusetts" was not scrapped until 1863, the other two were on the roster at the time of the consolidation. The Hinkley engines were of several dimensions—13½x20" 60" for passenger service and 16x20" 54" for freight service. In 1848, the Taunton Locomotive Works furnished ten—16x20" 54" locomotives for freight service. This brings us to the time their first locomotive was constructed in the Springfield Shops.

Wilson Eddy, youngest of ten children, was born February 24, 1813 at Chelsea, Vermont. His parents were Allen and Amy (West) Eddy of an honorable ancestry. They subsequently moved to Mt. Holly, Vermont and here Wilson Eddy went to school. At the age of nineteen, he went to Lowell and was employed by the Locks and Canals Co. In October of 1840, at the bidding of Major Whistler, he came to Springfield, working in the shops as a mechanic but was soon promoted to a foremanship. The road was in the process of construction and his eight years of experience at Lowell stood him in good stead. The "Massachusetts" nearly cost Mr. Eddy his life when she ran away, dragging her train into the roundhouse. Major Whistler had stipulated that the independent cut-off valve was to allow the expanding steam to

finish the stroke and this new feature was the cause of some concern until it was mastered. The date of his promotion to foreman is not given, but, in 1850, he was made Master Mechanic, succeeding Henry Gray to that position.

Up to this time, the road had received locomotives from the following builders—Locks & Canals Co., Ross Winans, William Norris, Hinkley & Drury, Baldwin and Taunton—all outstanding builders of their day. Wilson Eddy determined to try his hand at building, a not uncommon thing on our early railroads, to see if he could not improve on some of the weaknesses as they had developed on the Western R. R. His first locomotive—the “Addison Gilmore”—named after the president of the road, was completed very early in 1851. The following description of this locomotive, taken from the American Railroad Journal may be of interest:—“The engine is outside connection, with $15\frac{3}{8}$ inch cylinder and 26 inch stroke. The throw of the valve is $4\frac{1}{8}$ inches, lap of valve $\frac{5}{8}$ of an inch. The end of the blast pipes $3\frac{1}{4}$ inches in diameter. There is only one pair of driving wheels, 6 feet 9 inches in diameter. Behind them is a pair of Relief or Pony wheels, 4 feet 6 inches in diameter. The truck in front, has a bearing on each side of the wheels, which much lessens the strain on the axle, and in the case of a breaking of a shaft, it would be much less liable to get out of place or throw the engine from the track. The boiler is 50 inches in diameter, containing 196 tubes, 12 feet 4 inches long, $1\frac{3}{4}$ inches in diameter. The grate is $44\frac{1}{2}$ by 36 inches square. Firebox 54 inches deep. There are 1104 square feet of tube surface and 68 feet in the firebox, and $11\frac{1}{8}$ square feet of gate surface. From the center of the shaft of the Relief wheels to the center of the Truck pin, 17 feet 6 inches. From the center of the Relief wheels to the center of the driving wheel (on a horizontal line) 5 feet 9 inches. The top of the boiler is 8 feet above the rail. There is an arrangement by which in case of a heavy train, or bad state of the rail, the weight can be largely increased on the drivers, either when running or at rest.” This was the locomotive that won the trials, held under the auspices of the Boston & Lowell R. R. and the Middlesex Mechanics Association in 1851. However, the single drivers did not furnish enough adhesion and the locomotive was subsequently rebuilt to the 4-4-0 type, 72” drivers but with the same cylinders.

His next locomotive, the “Whistler”—built in 1852, was of the 4-4-0 type, $16\frac{3}{4} \times 22$ ” cylinders, 72” drivers. Both engines were used in passenger service, between Worcester and Springfield, and, I daresay their performance was closely watched. They were followed by delivery of four locomotives in 1853 from the Lowell Machine Shops, formerly the Locks & Canals Co. These were of the 4-4-0 type, 16×22 ” cylinders, 54” drivers, used in freight service. William Mason delivered six locomotives of the 4-4-0 type in 1855, 15×22 ” cylinders, 72” drivers and, from the records, they were used in passenger service between Albany and Pittsfield and Worcester and Springfield. Bemis & Co., of Springfield, Mass., delivered five passenger locomotives in 1857 and these also

were of the 4-4-0 type with 16x26" cylinders, 60" drivers. One of these, the "Pacific" exploded at West Warren in 1858 and, upon rebuilding, she was renamed "Baltic." As indicated in the roster that follows this chapter, additional locomotives were received from Mason, Taunton and Hinkley & Williams. The Grant Works thought they could build a better locomotive than Wilson Eddy and, in 1867, the year of the consolidation, four were received from that builder—but, they were not the equal of the "home product." Throughout this entire period and subsequent to the consolidation, Wilson Eddy continued to construct locomotives in the Springfield Shops, which for their regularity in service, won the sobriquet of "Eddy Clocks."

In all, Eddy constructed thirty engines for the Western R. R. and subsequent to the consolidation, the total was raised to nearly one hundred. All were of the 4-4-0 type, built for freight and passenger service. On the Western R. R., the former had 16x26" cylinders, 60" drivers, the passenger engines had 16x22" cylinders, 72" drivers. Subsequently, the diameter of the cylinders was increased to 17" and then to 18", the stroke remaining the same but the diameter of the drivers was decreased to 54" and 50". A few freight engines were built, towards the last, with 18¾x28" cylinders and 54" drivers, weight 40 tons. In the same way, his passenger engines grew in size, with a stroke of either 22" or 24", in nearly all instances the drivers were 66".

Wilson Eddy used a straight top boiler, the easiest type to maintain—no steam dome, the steam being collected in a perforated dry pipe and conveyed to the cylinders. Oddly enough, the new (1945) locomotive of the 4-8-4 type, New York Central #6000, has no dome and the steam is collected and conveyed in a perforated dry pipe, similar to that used by Wilson Eddy, nearly 100 years ago! The Eddy locomotives were free steamers and were wonderful "work horses"—let us hope the new engines will be equally successful.

His first engines had only one escape pipe, later two cannons were used—a state law subsequently passed required them to be muffled. A square sandbox was first used and this gave way to the conventional rounded type. The signal lamps for indicating a following or an extra train were placed on the bell bracket and the whistle was placed in front of the first cannon. His cylinders on the "Addison Gilmore" were placed horizontal and this was done on all subsequent locomotives. William Mason is generally credited with this, but Wilson Eddy preceded him by at least a couple of years. He used the slab frame, independent spring rigging without equalizers, contrary to American practice. The frames were bolted to the side of the firebox, expansion being provided for by movement at the cylinder connection. His throttle was a plain slide valve located in the T pipe in the smoke box and operated by a rod extending through the dry pipe to the back boiler head. But there was one important thing the "Addison Gilmore" and all of his other locomotives had—the oil cups for the lubrication of the steam chests and cylinders were placed in the cab, connected to them by a pipe and they could be lubricated, while in motion, without having to walk around the front end. Eddy never patented this device, nor any of his

others save a chain brake—had he done so, he would have received a comfortable income. Another peculiarity, was his short steam ports, only 8" long for his $18\frac{3}{4} \times 28$ " engines. His locomotives were not decorated in any way, no lettering appeared on the tender at all, metal numbers or raised metal letters on the sides of the cab served only to identify the locomotive. His driving wheel centers were very odd as will be noted in the illustrations.

Wilson Eddy, unlike William Mason, cared very little for the appearance of his locomotives. But one thing is certain, his locomotives were convenient to operate, they were easy to repair and he secured maximum wear before heavy repairs were necessary. There was a certain amount of uniformity in all of his locomotives and here, he and William Mason were both of the same mind. Both of these men influenced locomotive design and the "Eddy Clocks" were held in high esteem by their crews. Fortunate was the Western R. R. in having Wilson Eddy at the head of its Motive Power almost during its entire existence! His locomotives wore themselves out on those grades, giving faithful service. In 1889, the last few were sold by the Boston & Albany to a speculator. After repairing them, he expected to sell them in the south but, there being no market for them, they were scrapped. The old "Marmora" was used to heat the old Worcester station, but, when the new station was built, through the interest of Mr. John W. Merrill, our Curator, the locomotive was saved from the scrap pile and the locomotive was presented to Purdue University, where she yet remains.

Wilson Eddy, in 1856, like Major Whistler, went to Russia, but failure of the plans of the capitalists caused his resumption of his work at Springfield. Wilson Eddy was interested in civic affairs—acting as alderman and councilman in the city government and, in 1882 he represented the district in the state Legislature. He married Judith Robinson of Deerfield, New Hampshire, February 25, 1838. They had two children, Horace W. Eddy, who succeeded his father as Master Mechanic in 1880 and Helen M. Eddy, who married Monroe B. Washburn and died in 1870.

Upon his retirement, he lived quietly on Cypress Street, in Springfield, years ago called "Ferry Lane", since it led directly to the Connecticut river ferry. He loved to return to his native state—Vermont and, in the company of his son, he was wont to drive in a horse and carriage from Springfield to his boyhood surroundings. It was just after such a trip, while driving one hot morning in the company of his son, that he died of heart trouble on September 2, 1898. Wilson Eddy and his "clocks" are only a memory now but there is no question but that he designed and built locomotives that were especially adapted to the service for which they were intended and no one who knows anything about their performance can but admit they were a great success. The Grant engines, that were out to outdo the Eddy engines were gaily decorated and striped, resplendent in their brass work, yet these engines were all scrapped in 1884, while the Eddy "clocks" were still handling their trains over these mountains. Homely, I grant you, but they seldom failed in their daily performance.

Chapter XIV

LOCOMOTIVE ROSTER

In presenting a complete roster of the locomotives of this railroad, the author has made use of the records of the various builders of locomotives, copies of which are in the possession of this Society. Where the construction number is given, the date (of delivery or placing in service) is taken from their records. In the records of the corporation was found an inventory of the Western R. R. locomotives, corrected by Mr. Barnes on Feb. 15, 1843, thus settling for all times the builder and date of construction of the first twenty-four engines owned by the road. Subsequent information has been gathered from the annual reports and performance sheets of their locomotives, also, an early classification of B & A locomotives. Because of the closing date of their fiscal year, it is possible in some instances that a locomotive might have been constructed a few months earlier, thus bringing it into the previous year, rather than the year given. For example, the "Addison Gilmore" was actually constructed in 1850 and mention of such is made in their records. The locomotive actually entered service in 1851 and this date, where known, has been followed. The list is arranged in the order that the locomotives were delivered, irrespective of the locomotive number that was subsequently assigned them in the sixties.

Hampden	Locks & Canals	9-1839	2-2-0	12x18"	54"	10 tons					
	Sold	1848									
Berkshire	Locks & Canals	9-1839	2-2-0	12x18"	54"	10 tons					
	Sold	1848									
Hampshire	Locks & Canals	10-1839	2-2-0	12x18"	54"	10 tons					
	Sold—Cheshire R. R.	1848	—	"Rough & Ready"							
Worcester	Locks & Canals	11-1839	2-2-0	12x18"	54"	10 tons					
	Sold	1850									
Suffolk	Locks & Canals	12-1839	2-2-0	12x18"	54"	10 tons					
	Sold	1852									
20 Franklin	Locks & Canals	1-1840	2-2-0	12x18"	54"	10 tons					
	Sc	1861									
4 Massachusetts	Locks & Canals	11-1840	4-4-0	14x18"	54"	20 tons					
	Sc	1863									
Norfolk	Locks & Canals	6-1841	2-2-0	12x18"	54"	10 tons					
	Sold	1852									
Middlesex	Locks & Canals	6-1841	2-2-0	12x18"	54"	10 tons					
	Sold	1851									
Plymouth	Locks & Canals	6-1841	2-2-0	12x18"	54"	10 tons					
Sold—Ct. & Passumpsic Rivers R. R.		—1859	—	"Clyde"							
Bristol	Locks & Canals	7-1841	2-2-0	12x18"	54"	10 tons					
	Sold	1847									
1 New York	Locks & Canals	1-1842	4-4-0	14x18"	54"	20 tons					
	Sc	1867									
2 Rhode Island	Locks & Canals	2-1842	4-4-0	14x18"	54"	20 tons					
Barnstable	Locks & Canals	3-1842	2-2-0	12x18"	54"	10 tons					
	Sold	1859									
Essex	Locks & Canals	3-1842	2-2-0	12x18"	54"	10 tons					
	Sold	1852									
Chatham	Ross Winans	9-1841	?	?	?	?	Sc			1848	
Stockbridge	"	9-1841	?	?	?	?	Sc			1849	

Built originally for Baltimore & Port Deposit R. R.

Maryland	Ross Winans	9-1841	0-8-0	14½x24"	22 tons
	Sc	1847			
Michigan	Ross Winans	12-1841	0-8-0	14½x24"	22 tons
	Sc	1847			
Illinois	Ross Winans	2-1842	0-8-0	14½x24"	22 tons
	Sc	1849			
Arkansas	Baldwin	175 4-1842	0-8-0	14½x24"	22 tons
	Sc	1849			
Indiana	Baldwin	178 5-1842	0-8-0	14½x24"	22 tons
	Sc	1849			
Ohio	Ross Winans	6-1842	0-8-0	14½x24"	22 tons
	Sc	1847			
Missouri	Baldwin	179 6-1842	0-8-0	14½x24"	22 tons
	Sc	1849			
60 Albany	Wm. Norris	1842	No data	Renamed "Switcher"	
		1857	Wt. 15 tons		
32 Philadelphia	Wm. Norris	1842	No data—wt.	20 tons	
14 St. Louis	Hinkley & Dr	17 7-1843	4-4-0	13½x20"	60" 15 tons
Cincinnati	"	19 9-1843	"	"	" "
	Sold	1851			
30 Boston	Hinkley & Dr	15 4-1843	0-4-0	15x20"	48" 16 tons
	Rebuilt to		0-4-2	Sc 1866	
Atlantic	Baldwin	205 9-1844	0-6-0	16½x18"	46" 20 tons
	Sc	1854			
Pacific	Baldwin	206 10-1844	0-6-0	16½x18"	46" 20 tons
	Sc	1854			
United States	Baldwin	207 10-1844	0-6-0	16½x18"	46" 20 tons
	Sc	1858			
Springfield	Hinkley & Dr	49 8-1845	4-4-0	13½x20"	60" 15 tons
	Sold	1851			
5 Vermont	Hinkley & Dr	69 7-1846	4-4-0	16x20"	54" 20 tons
24 Maine	"	71 8-1846	"	"	" "
Pittsfield	"	72 8-1846	"	13½x20"	60" 15 tons
	Sold	1857			
Washington	Hinkley & Dr	74 9-1846	4-4-0	13½x20"	60" 15 tons
	Sold	1851			
6 Connecticut	Hinkley & Dr	79 10-1846	4-4-0	15x20"	54" 20 tons
11 Virginia	"	81 11-1846	"	16x20"	54" 20 tons
8 Kentucky	"	84 12-1846	"	"	" "
9 Tennessee	"	85 12-1846	"	"	" "
Huron	Baldwin	270 10-1846	0-6-0	16½x18"	46" 20 tons
Superior	"	271 10-1846	"	"	" "
Both Baldwin engines scrapped in 1858					
22 Louisiana	Hinkley & Dr	99 4-1847	4-4-0	16x20"	54" 20 tons
21 Iowa	"	100 5-1847	"	"	" "
36 Wisconsin	"	101 5-1847	"	"	" "
10 Buffalo	"	102 5-1847	"	16x20"	60" 20 tons
18 Detroit	"	103 5-1847	"	"	" "
17 Delaware	"	104 5-1847	"	16x20"	54" 20 tons
25 Mississippi	"	128 10-1847	"	"	" "
33 Pennsylvania	"	129 10-1847	"	"	" "
3 New Jersey	"	130 11-1847	"	"	" "
35 North Carolina	"	133 11-1847	"	"	" "
34 South Carolina	"	140 12-1847	"	"	" "
15 Chicago	"	145 1-1848	"	16x20"	60" 20 tons
7 Florida	"	146 2-1848	"	14x18"	54" 20 tons
12 Indianapolis	"	148 2-1848	"	16x20"	60" 20 tons
27 Nashville	"	149 2-1848	"	"	" "
19 Georgia	"	150 2-1848	"	"	" "
31 New Orleans	"	152 2-1848	"	"	" "
23 Louisville	"	155 3-1848	"	"	" "

20	Richmond	Hinkley & Dr	156	3-1848	"	"	"	"
	Renamed—Franklin			1863				
16	Columbus	Hinkley & Dr	157	3-1848	4-4-0	16x20"	60"	20 tons
37	Alabama	"	159	3-1848	"	16x20"	54"	20 tons
29	New Hampshire	"	166	4-1848	"	"	"	"
28	New England	"	171	5-1848	"	"	"	"
26	Montreal	"	201	9-1848	"	16x20"	60"	20 tons
13	Bristol	"	209	11-1848	4-4-0	15x20"	60"	20 tons
39	Ontario	Taunton	8	2-1848	"	16x20"	54"	20 tons
	Champlain	"	9	2-1848	"	"	"	"
		Sold		1858				
38	Erie	Taunton	12	3-1848	"	16x20"	54"	20 tons
42	St. Clair	"	13	5-1848	"	"	"	"
40	St. Lawrence	"	14	5-1848	"	"	"	"
41	Providence	"	16	9-1848	"	"	"	"
43	Niagara	"	19	8-1848	"	"	"	"
80	Concord	"	20	8-1848	"	"	"	"
69	Augusta	"	22	9-1848	"	"	"	"
77	Nantucket	"	23	10-1848	"	"	"	"
45	Addison Gilmore	Western R. R.		1851	4-2-2	15½x26"	81"	20 tons
	Rebuilt				4-4-0	"	72"	"
46	Whistler	Western R. R.		1852	"	16¾x22"	72"	20 tons
57	Cleveland	Lowell M S	119	1853	"	16x22"	54"	25 tons
		Sold		1860				
54	California	Lowell M S	120	1853	4-4-0	16x22"	54"	25 tons
56	Texas	"	121	1853	"	"	"	"
55	Oregon	"	122	1853	"	"	"	"
61	San Francisco	Taunton	170	7-1854	"	16x20"	72"	25 tons
	Originally the	"Henry M. Holbrook"						
47	Wales	Western R. R.		1854	4-4-0	16¾x22"	72"	25 tons
50	Olympus	Mason	13	1-1855	4-4-0	15x22"	72"	25 tons
48	Apollo	"	14	1-1855	"	"	"	"
53	Sonora	"	15	2-1855	"	"	"	"
49	Nevada	"	16	1-1855	"	"	"	"
52	Saranak	"	19	5-1855	"	"	"	"
51	Panama	"	20	5-1855	"	"	"	"
63	Bliss	Western R. R.		1857	4-4-0	15½x26"	72"	25 tons
68	Swift	"		1858	"	16¾x22"	72"	25 tons
62	Albany	Springfield L W		1857	"	16x26"	60"	27 tons
59	Alger	"		1857	"	"	"	"
65	Atlantic	"		1857	"	"	"	"
72	Henry Gray	"		1857	"	"	"	"
	Rebuilt	Western R. R.		1863				
64	Pacific	Springfield L W		1857	4-4-0	16x26"	60"	27 tons
	Expl—reb	Western R. R.		1858	Renamed "Baltic"			
58	Waterman	Amoskeag		1857	4-4-0	15x22"	66"	20 tons
66	Champlain	Western R. R.		1859	"	16x26"	60"	25 tons
67	Superior	"		1859	"	"	"	"
69	Dwight	"		1860	"	16x22"	72"	25 tons
70	Massachusetts	"		1861	4-4-0	16x26"	60"	27 tons
71	Huron	"		1862	"	"	"	"
73	Chapin	"		1864	"	16x22"	72"	"
74	Springfield	"		1864	"	"	"	"
75	Worcester	"		1865	"	"	"	"
76	Pittsfield	"		1865	"	16x26"	60"	"
77	Nantucket	"		1866	"	"	"	"
78	Minnesota	"		1866	"	"	"	"
79	Colorado	"		1866	"	"	"	"
80	Concord	"		1866	"	"	"	"
81	Montana	"		1866	"	"	"	"
82	Dacotah	"		1866	"	"	"	"
83	Arizona	"		1866	"	"	"	"

84 Greenbush	Mason	242	10-1866	"	16x24"	60"	28 tons
85 Chatham	"	243	10-1866	"	"	"	"
86 Geo. H. Power	Taunton	392	10-1866	"	"	"	"
87 Hudson	"	395	11-1866	"	"	"	"
88 Idaho	Western R. R.		1867	"	16x26"	60"	29 tons
89 Nebraska	"		1867	"	"	"	"
90 Michigan	"		1867	"	"	"	"
91 Maryland	"		1867	"	"	"	"
92 Samson	Hinkley & Wms		1867	0-4-0	15x22"	48"	22 tons
93 Goliath	"	813	1867	"	"	"	"
94 Ohio	"	817	1867	4-4-0	16x24"	60"	32 tons
95 Illinois	"	807	1867	"	"	"	"
96 Missouri	Western R. R.		1867	"	16x26"	60"	29 tons
97 Indiana	"		1867	"	"	"	"
98 Arkansas	"		1867	"	"	"	"
99 Alaska	"		1867	"	"	"	"
100 Suffolk	Grant		1867	"	16x24"	60"	"
101 Middlesex	"		1867	"	"	"	"
102 Hampden	"		1867	"	"	"	"
103 Berkshire	"		1867	"	"	"	"
1 New York	Western R. R.		1867	"	16x26"	60"	"
44 Grey Lock	Hinkley & Dr	98	4-1847	4-4-0	14x18"	60"	20 tons
ordered by the Pittsfield & North Adams R. R. and included with the Western R. R. Locomotives 1859-1860.							

Where the disposition is not indicated, these locomotives came into the consolidation. The Western R. R. locomotives were not renumbered but carried the same numbers in the B & A series. Nos. 104-109 incl. were completed at Springfield in 1868 and, strictly, should not be included in the Western roster. They do not appear in their reports or records. The Boston & Worcester locomotives were numbered from 110 upwards.

In the New York State R. R. Report for 1856 will be found a roster of locomotives on the Albany & West Stockbridge R. R. These are all Western R. R. locomotives, used on the A & W. S., the latter owned no motive power and equipment, assigned by the Western R. R. for purposes of taxation.

Relative to the Hudson & Berkshire, as mentioned in Bulletin #62, von Gerstner found three Norris engines in service on that road—the "Hudson" and "Berkshire" built in 1838 and the "Pittsfield" in 1839, all 10½x18" cyl. In the New York State R. R. Report for 1856, we find the Hudson & Boston, the name after the Western R. R. reorganized the Hudson & Berkshire, as owning the following:

	Placed in Service	Cylinder	Drivers	Condition
Switcher	Dec. 1, 1854	12"	44"	Good
Chas. C. Alger	"	14"	54"	Good
James Mellen	"	13"	54"	Good
Waterman	May 1, 1856	14"	54"	Good
Albany	Dec. 1, 1854	12½"	48"	Good

The report closes with the note—"all these engines had been previously in use." Doubtless they had seen service elsewhere, but where, the name of the road or the builder, for the moment I do not know.

Of the Locks & Canals locomotives, I have indicated in the list the disposition of two—the "Plymouth" was sold to the Connecticut & Pasumpsic Rivers R. R. in 1859 where she was renamed "Clyde." The "Hampshire" was delivered to the Cheshire R. R., June 1, 1847 and was rebuilt by them in January 1863, to an 0-4-0 type. In 1870 she was sold to the Portland L. W., they rebuilt her and sold her to the Whitefield & Jefferson R. R. as the "Jefferson" and she was not scrapped until 1902. How much of the original engine was left at that time, I cannot say.

Amongst the papers of the Western R. R., was found a memorandum relative to the disposition of some of these engines:

The "Bristol" was sold, evidently prior to the arrival of the second "Bristol" in 1848, but to whom, the records do not disclose. In 1851, the Western R. R. disposed of five of its locomotives. Two were sold for \$9000.00 to Messrs. Stone & Witt, builders of the Akron Branch R. R. These were the "Norfolk" and "Middlesex"—the former taking the name of "Summit" on the Akron Branch. One locomotive was sold for \$3500.00 to the Rutland & Washington R. R. and this was probably the "Essex." One locomotive was sold to the Cleveland, Painesville & Ash-tabula R. R. for \$5000.00 and this was the "Worcester"—renamed "Mount Vernon." One more locomotive sold to A. Boody & Co. for \$1711.87 and this was probably the "Suffolk"—renamed "Rhode Island" on the Cleveland & Pittsburgh R. R. roster.

On September 23, 1852, the "Essex" is reported as being sold to E. Harris. The records confirm this engine as being in service part of this year—evidently she was not disposed of the year previous. On the Michigan Central R. R., we find the "Jupiter," Locks & Canals Co., placed on the road in 1850, 12x18" 36", 0-4-0 type. This might have been any one of the very first engines purchased by this road.

This is all we know relative to the disposition of these early Locks & Canals locomotives, discarded because they were too light for service and there was still plenty of engine to help build the road and run the first trains for their new owners.

Chapter XV

THREE FAMOUS MEN

WHISTLER, BLISS AND CHAPIN

Before closing the history of this little Massachusetts railroad, it is only fair to include a brief biography of the three men, who perhaps were responsible for its success.

George Washington Whistler was born in the military post of Fort Dearborn, now Chicago, in 1800. His father, John Whistler, came to America as a British soldier under Burgoyne. Upon the surrender of the latter, John Whistler returned to England under parole, but upon the signing of the peace treaty he returned with his family, enlisting in the United States Army as an officer in the engineers. John Whistler built Fort Dearborn and the son, following in his father's footsteps entered and graduated from West Point and at the time of his resignation he was a major in the engineers.

At the age of twenty-eight we find him, in the company of William Gibbs McNeil, engaged in the survey of the Baltimore & Ohio R. R. They had already studied railroads in Europe and the friendship between these two was further strengthened when Whistler married McNeil's sister Anna. In 1834 he became superintendent of the Locks & Canals Co. at Lowell, Massachusetts, giving his complete attention to the construction of locomotives by that company. In 1837 he moved from Lowell to Stonington, Connecticut and here, in the company of his brother-in-law and under the direction of William H. Swift, he built the New York, Providence & Boston R. R. Until the time he was called to the Western R. R. in 1840, he managed the N. Y. P. & B. R. R., and he always considered Stonington his home. Although he remained with the Western R. R. only a scant two years, they were two important years in the life of that corporation—its construction over the Berkshire Mountains. In 1842 he was called to Russia to build the railroad between St. Petersburg and Moscow and here his experiences have been set forth in that recently published book—"Whistler's Father." Seven years later he died of the cholera.

Whistler was married twice. His first wife, Deborah Swift died in 1827 at the age of twenty three. Of his children, George William followed his father's profession, accompanied him to Russia and subsequently died in England. Deborah married Seymour Hayden of London, a noted surgeon, later and better known for his etchings and Joseph Swift who died as a school boy.

His second wife, as we have already mentioned, was the sister of William Gibbs McNeil. They had five sons—James Abbott, the famous painter and artist; William Gibbs, a London physician; Kirk Boott who died in Springfield and Charles Donald and John, both of whom died in Russia. It was the second Mrs. Whistler that is portrayed in the famous painting—Whistler's Mother.

Of medium height, erect and military in his bearing, Major Whistler was always a prominent figure wherever he went. He planned the first three locomotives for the Western R. R. and they were a success because of defects that were pointed out to him by a fireman on the "King Philip" on the Stonington road. The latter did not recognize Whistler and although he was annoyed by the failure of the machine, he said, "And he told me the truth, confound him!" His home life was ideal and his skill as an artist was frequently used to amuse the children and many a pleasant evening was furnished with his daughter at the piano, the Major with his flute. Of the many places and cities where he lived, Stonington, Connecticut was always considered "home."

George Bliss, named for his father, was the eldest son of a prominent lawyer, politician and magistrate of western Massachusetts. He was born in Springfield, November 16, 1793, educated in the schools of that city and graduated from Yale University in 1812. He studied law in his father's office and, in 1815 opened his own law office in Monson, where he remained for seven years.

Springfield, then as now, the largest town in the county, had a population of not over 3500 people. It was the center of many large mercantile firms, amongst them was that of E. & J. Dwight. In addition to having much of the wholesale trade of western Massachusetts, they purchased land and owned all of the property where the present cities of Chicopee and Cabotville are located. In 1822, James L. Dwight, head of the firm, died and it became necessary to close up their business and collect their debts. Mr. Bliss had arranged for the purchase of nearly all of this land and, in April, 1825, he married Mary, daughter of Jonathan Dwight. Subsequently, he was a junior member with his father-in-law in the firm of Dwight & Bliss that handled the law business of the firm of E. & J. Dwight. In 1827 he was elected to the state legislature and his political career lasted until 1853, when he presided over the House as speaker. Here he was instrumental in carrying through the act of 1827-8, establishing boards of county commissioners and defining their duties. In 1835, while president of the Senate, he performed the exacting task of chairman of a committee to examine and report upon the revised statutes as drawn up by a commission appointed for that purpose.

But perhaps George Bliss is best known for his efforts with our early railroads. That he was responsible for the construction of the Western R. R., and, having it built through Springfield, no one can deny. For ten long critical years he was the mainspring of this enterprise—first as General Agent under Thomas B. Wales and later as President of the corporation. He aroused public interest in the state, he secured the stock subscriptions, he was instrumental in obtaining state aid and he overcame manifold difficulties. He directed the first surveys between Worcester and Albany and he saw the first trains run over the road. He directed the first dividend payment on its stock and he saw the

stock nearly at par and when he retired in February, 1846, it was a thoroughly organized, respectably well equipped piece of property, prepared for future operation. Although of independent means, his paltry salary of \$500.00 per annum could never be considered adequate compensation for what he gave in return.

Later in 1846, in the company of his wife and two children, George and Sarah, we find him on an extensive tour of Great Britain, Ireland and the continent. They returned in September, 1847. In 1848, at the suggestion of Gov. Washington Hunt of New York, they both joined in the purchase of the Erie & Kalamazoo R. R. and he was the means of completing what is now the old Lake Shore & Michigan Southern Ry. into Chicago. In 1853 he was called to the presidency of the Chicago & Mississippi R. R., and upon its completion in 1854 to Joliet, in connection with the Chicago & Alton R. R., he resigned. In 1857, when the Michigan Southern became heavily embarrassed, he was called to serve as a director, was again made president in 1858 and held that position until May, 1860, when at the age of 67, he withdrew from all active business. He was one of the originators of the Hartford & Springfield R. R. and a director of the Chicago & Rock Island R. R. For twelve years he lived quietly in Springfield, one of its most useful citizens. Handicapped by poor health, he overcame great obstacles. He gave to his church and to his city—the city library, Hampden park, the Home for the Friendless—all had his support.

Chester Williams Chapin, born in Ludlow, Massachusetts, December 16, 1798, was one of seven children. The family moved to Chicopee and here the father died, leaving the wife and sons to carry on the struggle with the farm. His schooling was slight, the Westfield Academy, and, returning to Chicopee, he was employed with a yoke of oxen, preparing to build the foundations of the mills. At the age of 18 he came to Springfield where he tended the bar in the Williams House for his brother Erastus. Then he opened a store and soon formed a business partnership with Stephen O. Bemis. Next he married the daughter of Col. Abel Chapin of Cabotville and we find him upon the construction of the first paper mill in this country.

His next venture was in the field of transportation. Major Frank Morgan of Palmer and Horatio Sargent were both interested in the stage lines in the Connecticut valley. Young Chapin was taken into this partnership, but with the coming of the steamboat on the Connecticut river, he quickly disposed of his interests in the stage lines and embarked as a steamboat man and for a dozen years controlled the lines between Springfield and Hartford.

With the coming of the railroad between those two cities, he disposed of his interests in 1844, became a director in the railroad and active in its management. In 1850 he was elected a director of the Western R. R., but the following year he resigned and became President of the Connecticut River R. R., returning, in the same capacity to the Western R. R. in 1854.

It was Chester W. Chapin that placed the road on a firm foundation. It was through his efforts that the road was double tracked, the bridge at Albany was built and lastly, it was through his efforts that the Boston & Albany R. R. was formed. It was only natural that he should be the first president of the new corporation. Here again, his capabilities as a manager were demonstrated—land was purchased in Boston, the Grand Junction R. R. enabled the new B & A to deliver grain and merchandise at tidewater, new buildings, new stations, new locomotives and new cars, all brought increasing revenue to this conservatively managed Massachusetts corporation.

He was a director of the New York Central & Hudson River R. R., the Hartford & New Haven (later the N. Y. N. H. & H.) and the Connecticut River Railroads. He passed away on June 10, 1883, a man who had the love and esteem of all that knew or came in contact with him.

It was this trio of men, each one coming at the precise moment that spelled success for this enterprise. It was the training and the firm belief that the enterprise could be built that enabled George Washington Whistler to build this road across the Berkshires; it was the untiring energy and zeal of George Bliss that enabled him to overcome the many obstacles during its early formative years and finally, it was Chester Williams Chapin who saw its possibilities and its importance to the people of this Commonwealth, that formed the consolidation and laid the foundations for a railroad that has always stood high in New England and set the example for the others.

And finally, some of you will ask, where did the author get all of his material. To Miss Alice K. Moore of the Connecticut Valley Historical Society, I am indebted to practically all of this biographical material and for the privilege of the several reproductions which appear herewith. For the corporate history, the records of the Western R. R., have since been deposited in the Baker Library of the Harvard Business School and these and the Memoirs of George Bliss, published in 1863, have furnished the factual details of—"Whistler's Railroad!"

ACKNOWLEDGEMENTS

The author is indebted to our member—Charles O. Egerton of Springfield for furnishing the three sketches. That of the cover shows the #55, one of the "Eddy Clocks"—westbound in the Springfield station, with the Granite Building, housing the General Offices in the background. The other two, one depicting one of the Locks & Canals engines at Springfield, the other showing the "Maryland"—one of the Winans engines in the Berkshires; all three of these sketches have been prepared with the utmost care and accuracy and we are indebted to Mr. Egerton for his kindness in their reproduction.

To Miss Alice K. Moore of the Connecticut Valley Historical Society of Springfield, the author recalls a very pleasant day examining the files in that Society. The portraits of George Bliss and Chester Chapin, all

of the notices and timetables, save that of Dec. 4, 1843; the Springfield Station of 1892, the bridge spanning the Connecticut river, the Granite Building and the State Line Station, all were furnished through her kindness.

The portrait of Whistler was furnished by the Baker Library and all of the reproductions of locomotives, save the "Gilmore," "Massachusetts" and the Pittsfield roundhouse, came from the Merrill collection of this society. To Robert R. Brown, our Eastern Canadian Representative, I am indebted to his kindness in furnishing the excellent map.

For the translation of the life and career of E. Andre Schefer, I am indebted to Miss Adrienne Albee and to Mr. Verlot of the New York Office of the French Railways.

A PLEA FOR A WESTERN RAILROAD

One of the early advocates for a western railroad was Nathan Hale, Editor of the *Boston Daily Advertiser*. Through his editorials and by means of a nom de plume, he kept the subject before his readers. Later, he was to become the President of the Boston & Worcester R. R., but the following is taken from his paper of November 19, 1828:

The Western Railway

It would be a waste of time to say much more on the principle of railways. That is now as well established as the principle of canals, or good roads. They have been long known in England, and lately adopted on the continent of Europe; and at this moment, are constructing in various parts of this country. Their comparative advantages over other modes of transportation, may be inferred from these facts alone, but more especially, from their being located in England alongside, and in competition with canals. The cost of railways compared with canals is also ascertained, as well as their respective capabilities, and both have been proved by experiments to be in favor of the former. Their peculiar fitness for traveling renders them particularly desirable in this country, where there is more traveling than any part in the world. Here, the whole population is in motion; whereas in old countries, there are millions who have never been beyond the sound of the parish bell. This peculiarity of our countrymen affords strong ground for presuming that a great revenue will be derived from that source. But, if a railway from Boston westward, were not to pay one mill of interest, it is incumbent upon the State to make this necessary improvement, to enable us to keep pace with our neighbors. It is for the interest of the interior, that we may keep our population at home, and thereby increase the value of our lands, and improve the rich inheritance we have in our forests, mineral products and water powers. It is for the interest of the seaboard to increase the demand for the products of commercial enterprise and the fisheries. The advantages which town and country will derive from a cheap and rapid intercourse, are too evident and numerous to repeat. But there is one *very serious consideration* for the citizens of Boston and the vicinity for twenty miles around, including the sea coasts, which depend upon the commerce of the capital. It is this: If we do not make a Railway, and that immediately, this city and the described vicinity, must inevitably lose a part of its most valuable trade. This is not said on slight grounds, or to give useless alarm; it is an opinion predicated by facts which already stare us in the face. Look at the entries into the port of Worcester. You will there see a long list of all those heavy articles which were wont to be sent from Boston. We shall next see the return cargoes to Providence, of all those articles which constitute our southern and West India trade; and then the mackerel fishery, which now employs thousands, and brings every year to this city and neighborhood hundred of thousand of dollars; this too will go round the Cape of Providence. The very last year, molasses was

carried by land at a great expense to the new Worcester Distillery; but who can expect ever to see another hogshead transported by land, without a Railway. Our trade with the interior, and the coasting trade dependent upon it, are gone, without this indispensable improvement. It is in vain to say that great capital and ancient habits will secure this trade to us. Capital will follow the most convenient channels and go to the best market. It is in vain to amuse ourselves with fallacious hopes, or to dissemble the truth. Providence has great advantages, and will soon realize them to our cost. In the first place it is nearer the southern markets than Boston; vessels bound to Boston are frequently detained for weeks in the Vineyard, which could reach Providence in a day. As for capital, Providence has its own, and that of New York, with an inexhaustible supply of goods at command from thence, and both available within forty-eight hours notice.

The citizens of Boston a few years ago were clamorous for an opportunity to expend a million for a new market, which I believe has not enriched the city *when I look at my tax bill*. Now, if they will once more press upon his Honor the Mayor to take half a million more out of our pockets, and build a Railway to Worcester, without waiting for the tardy movements of the State, I am convinced we shall be the richer. All I possess in the world is real estate, and I would most heartily consent to have it taxed this very day in full share for this improvement; and think my property enhanced twenty-five per cent by it. I would not be supposed to infer, that real estate will be alone increased in value by a Railway, or reduced for the want of one; because, it is well known that in a commercial city, there is a concentration of interests, that makes every individual concern, feel every impulse which each and every other may receive. From the scavenger to the banker, we must all rise or fall together. Bank and insurance stocks depend as much on the general business and growth of the city, as real estate, and they will as surely fall if any portion of our present trade is taken away.

I make these remarks, not that I believe the Legislature will be so unmindful of its duty, as to refuse to promote, in some way or other, this great and necessary work; but I do it from abundant precaution, and to avoid delay; so that some influential citizens may be prepared, and stand ready to petition for a charter at the very next meeting of the Legislature, if there should be any demur on the part of that body.

Although the above was signed by "A Citizen," there is little doubt but that it was written by Nathan Hale, one of our early advocates for a Western R. R.

REPORT ON THE RUNNING OF THE ROAD

1839 Document No. 21

The Committee, who by an order of the Board of the 4th of April last, were instructed to report at an early date, a plan for the organization of the force necessary to be employed *in the running of the road*, and in the business of the corporation at various stations between Worcester and Springfield, when the road shall be opened for use, have considered the subject and submit the following

Report

That they recommend that this part of the road be in two divisions, the first including all east of the West Brookfield Station and the second all west of that point, including the West Brookfield Station.

That the Resident Engineer be ex-officio the General Superintendent; that he have the direction of the moving power and of all the officers and laborers employed upon the road and of all business done thereon, and keep all the accounts relating to the business of the road and the expenses thereon,

And that there be the following officers under the Superintendent, viz.

1. A Master of Transportation at Springfield to have the immediate care of the transportation of passengers and merchandise at that station and the control of the Conductors when upon that division and the direction of all persons employed about the same, and the care and direction of the Repair Shop there and the business done, and the persons employed therein, and, in general a Superintendence of all of the business of the Corporation connected with the Springfield station, under the General Superintendent.

2. A Master of Transportation at Worcester, with powers and duties similar to those at Springfield, so far as applicable.

3. A Superintendent of Repairs or Road Master, for the whole line, having the care and direction of all repairs of the road, buildings and other property of the Corporation, and all persons employed about the same:—excepting the machine shop and persons therein employed.

4. Two Conductors of the passenger trains subject to the direction of the Master of Transportation, within their respective divisions.

5. A Master Mechanic, having, under the direction of the Master of Transportation at Springfield, the immediate charge of the Machine Shop at that station, and of the business there done, and the persons employed therein; and the immediate control and direction of all the Engine men, and the persons employed in Working the Engines upon the whole line.

6. One Way Agent at each of the stations of Clappville, Charlton, South Brookfield, West Brookfield, Warren, Palmer and Wilbraham, and at such other regular stations as shall be hereafter established, having charge of all the local business of the corporation connected with their

several stations, under the direction of the Masters of Transportation within their divisions.

7. A number of Brakemen sufficient to supply one for every two cars in actual operation.

8. Such numbers of Laborers, in parties under the Road Master, as the business of that department may from time to time require, with an overseer to each party.

9. Such numbers of Laborers at the several stations, as the business of each may require.

10. One Clerk and Bookkeeper to the General Superintendent at Springfield.

11. A Clerk to the Master of Transportation at Springfield, to be also the Ticket Clerk there.

12. A Ticket Clerk at Worcester.

—THOS. B. WALES

Read and Accepted
June 12, 1839.

RESIGNATION OF G. W. WHISTLER

1842 Document No. 74

Engineer's Office, W. R. R.
Springfield, May 17th, 1842.

To the President and Directors
of the Western Railroad Corporation

Gentlemen :

Having received an invitation to render professional service to the Russian government, I have thought it not improper under the circumstances to accept it. I am under the necessity therefore, of tendering my resignation of the appointment as Engineer of the Western Railroad, and respectfully request that it may be accepted if—

Circumstances render it necessary for me to leave this country as early as the 1st of June next. The withdrawing thus suddenly from the service of the Corporation, I should sincerely regret if it had any inconvenience, but in the present condition of the work and its affairs, I cannot believe it will. The accounts for construction will all be adjusted and mostly paid. Capt. Swift, who is fully acquainted with all circumstances connected with this Department has kindly offered to make the necessary explanations if any question should arise.

I trust my long connection with the Western Railroad, and the pride I shall ever feel in common with all who have been associated in its construction, entitle me in the privilege of expressing my sincere wishes for its entire success, and I cannot separate from it without acknowledging my obligations to the Board of Directors for their kind support in the execution of the trust confided to me.

With great respect,

Your Obt. Servt.

—GEORGE W. WHISTLER (sgnd)

ACCEPTANCE OF WHISTLER'S RESIGNATION

1842 Document No. 79

The Directors of the Western Rail Road in accepting the resignation of Major George W. Whistler, who for six years past has been in the service of the Corporation as Consulting or Chief Engineer, write in expressing their estimation of his character and their confidence in his skill.

Employed in surveying, locating and constructing a railroad over a section of country and through mountain passes which seemed to bid defiance to the power of man, his genius and industry have triumphed over all obstacles and have succeeded in surmounting a summit of more than 1400 feet without in any case losing the elevation that had previously been obtained.

In taking leave of Major Whistler, the Directors would tender him their best wishes for his success—express their satisfaction with the intercourse they had had with him and their confidence that in the great European work that he has been selected to superintend, he will add new honor to his own name and to that of his country.

Boston, June 10, 1842

GEO. BLISS
WILLIAM JACKSON
JOHN W. LINCOLN
ABRAHAM T. LOWE
EDWIN DWIGHT
ELIAS HASKET DERBY
P. P. DE GRAND

JOSIAH QUINCY, JR.
Treasurer

WESTERN R. R.

Organization and duties of Officers—Feb. 1, 1843

The *President* is General Superintendent of the road and as such has the Chief Executive authority and a constant supervision and control over all departments, excepting that of the Treasurer and Clerk. The *Engineer*, under the President is charged more especially with the professional duty connected with the road and its repairs, the trains and moving power and their repairs and the force employed thereon.

Prior to March, 1842, the Agent of the Corporation had been especially charged with the duties of settling land damages and claims for right of way and all other duties not specifically assigned to any other person. At that time the late Engineer had supervision of the construction and equipment of the road and as Superintendent he also had charge of the whole Transportation Department—the running of the road—the Agent however aiding him in these duties and performing such others, particularly in connection with foreign companies, as were assigned to him by votes of the Board.

On the 1st of March last, after a full investigation and detailed reports, the organization was changed, the office of Agent abolished and his power and duties transferred to the President. The President was made an active Executive officer, and was required to live at Springfield and to devote his time to the duties of his office. He was charged with the supervision of all the departments of business and more especially with that relating to the traffic on the road, the arrangement of tariffs of prices, the transportation of merchandise, making special contracts therefor and arranging the numerous questions and claims arising therefrom and with the foreign correspondence, that arising from the connexion in business with other companies, leaving with Engineer the professional department of business more especially—that connected with the running of the road as Superintendent, the care and management of the moving power and its repairs, the regulation and control of all the trains, the care of the road and depots and their repairs and the immediate supervision and control of all persons employed in these several departments. The President has only such supervision of the Engineer as was consistent with the control of the latter officer of all the operations of his department and an efficient and prompt discharge of duty by him and all persons immediately under him. On the first of June 1842, the Engineer suddenly resigned his office and left the country under an engagement with the Russian Government. In that emergency, contrary to the advice and wishes of the President and against his remonstrances, the Board devolved upon him all the duties and powers of the Engineer, thus uniting in him all the duties which the year previous had been discharged by the President, Engineer and Agent. These duties he continued to discharge without aid, until at his pressing solicitation, the Board, about Oct. 1st appointed the present Engineer to office and prescribed his duties specifically as follows, viz Under the President—To take charge of the whole moving power and

cars, the passenger and merchandise trains and their running, the depots, buildings and fixtures, the machine shops and all repairs of either and of all the officers and men employed in either department. To take charge of the whole road and its repairs and the superintendence of all the officers and men employed in that department. To aid the President in the discharge of other duties when required to do so and generally to discharge other duties which may hereafter be assigned to him. This is the present division and assignment of duty. The President having all the primary executive authority under the Board of Directors and discharging all the executive duties not thus specifically assigned to the Engineer.

The *Masters of Transportation* have each the immediate supervision of a portion of the road and of all the depots in their respective divisions and of the agents and men employed at them. They are to execute all orders in relation to those depots and the business done at them. They are held responsible for the faithful performance of duty on the part of the Depot Agents, for the accuracy of their accounts, the corrections and punctual transmission of their daily and monthly returns, the punctual transmission of merchandise left at their depots and the delivery of such as is consigned there; the collection of all monies due for goods consigned to them and the faithful accounting for and paying over of the same. He must also see that cars are provided for all goods to leave a station and it is his duty to pay all the officers and men within his division and return the proper voucher monthly. In case of any irregularity in the trains or in any business on his division, he must apply himself to correct the same, and for these and other purposes he is required to make frequent visits to all the depots under his care. Heretofore there have been 3 officers of this class but after the 1st of February, the Directors propose to retain but 2, dividing the whole 156 miles of road into 2 Divisions, giving to this official at Springfield the care of about 86 miles with 16 depots and to the official at Greenbush 70 miles with 14 depots.

The *Road Masters*. Three of them have each about 50 miles of road, including depots, buildings and bridges, under his care. They are held responsible that their divisions are always in good repair. They have parties under them from 5 to 7 on each division with an overseer to each and such a number of men as the engineer of their sub-division may from time to time require. In each party is usually a tracklayer. The Road Masters are charged with the duty of clearing their divisions of snow in winter and with executing all new work or any alterations, superintending all additions to depots and generally any similar work required by the Engineer. In case of accidents on the road they are to repair immediately to the scene and promptly render all aid which may be necessary.

The local *Depot Agents* are required to transact all the ordinary duties of the several stations—receive and transmit merchandise and forward all to its proper destination, attend upon all passenger and

freight trains, wait upon and see to passengers and their baggage, provide wood, water and other necessities for the trains, send way bills with all merchandise forwarded and copies thereof to the President's office. To make daily reports of all business done to the President and transmit daily all cash received.

The Bookkeepers and Clerks at the office of the President and the Clerks of the Master of Transportation and Freight Agents are always engaged in the duties appropriate to such offices.

The *Master Mechanics* superintend and direct all the operations of the Machine Shops, the repairs of Engines, cars and other equipment of the road and the making of all new work required. It is their duty to see personally that every engine and car put upon the trains is in perfect order for running and properly manned and provided with competent Engineer, fireman and brakeman. They are required to keep a detailed account of all repairs upon each Engine and car and of all new work and to make monthly Reports of the same.

The outdoor assistant and clerk of the President acts also as Agent for the purchase, distribution and inspection of all fuel purchased and used on the whole road. He is also charged with the settlement of claims for damages caused by fire from the Engines or by the trains and as solicitor he attends to all suits in which the Corporation are interested and to very numerous (?) in which the corporation are summoned as trustees both before the county courts and Justice of Peace, throughout the whole line.

The Local Agent at Boston transacts all the business of the Company there, not connected with the offices of the Treasurer and Clerk, such as attention to the freighting business, making special contracts for transportation in connection with the Supt. of the Worcester Co., regulating advertisements, making purchases and paying bills against the Corporation. He is also charged with the duty of collecting information affecting the business of the road, and communicating information to all persons making inquiries at his office.

The Freight Agents at Springfield and Greenbush transact all business at those stations relating to the merchandise department.

GEORGE BLISS, Prest.

Emile Andre Schefer

Emile Andre Schefer, artist, life member of this Society, was knocked down by a bicycle on March 15th, 1942, suffered from a fractured skull and passed away during the night without regaining consciousness. This great artist, who had no other means of livelihood than his brush, left a young widow and six children, the oldest of which is thirteen, the youngest, one.

Born in Paris, February 14, 1896, Schefer studied at the Lydee Hoche at Versailles. With some friends interested in the railroad, he studied trains and their design. These designs he faithfully copied in his notebook and they are hardly marred by a mistake. They show the hours of observation on the foot bridges that cross the station, the conversations between friends, the enthusiasm for a type of stack, dome or cab and the details of construction.

He served in World War I and drove a lorry. Even here he made sketches. With the coming of peace he resumed his work and although he still faithfully delineated the locomotives and trains, as he saw them, he also made sketches of equipment as it should be to give a better impression of power, speed and style.

Married in 1927, we find him in his home a perfect friend, mild, simple, frank and sensible. His spirit of refinement asserted itself in his sometimes ironic but always kind remarks. His life, like his art, was correct and scrupulous. In his field which was new, even with his talent as great as it was, it was difficult for him to become known and accepted. It took courage on his part, warmth and sympathy on the part of his wife. His tragic death came just as he was about to reap the fruits of his long efforts.

His work has appeared in all of the major railroad publications of France and our members will also find them in our own bulletin. In connection with the French railroads, he designed railroad games for children, pictorial dictionaries for schools. He designed collectors items—an artistic pottery ashtray—"Paris-Saint-Germain" and the dish commemorating the "Royal Train." He also served to give his opinion to the technical research departments on new designs for streamlined equipment. His faith in the railroads and the enthusiasm with which he promoted all that could add to the prestige of the railroads; speed, security, technical progress and the confidence which he inspired in the railroad laborers that, in 1939, the young association—"Les Amis de Notre Metier" asked him to take his place as one of their founding fathers.

Those of us who knew Emile Andre Schefer have lost a friend and the railroad world, especially that of France, has lost one of the most painstaking and careful delineators that we have ever seen. And, in this connection, word has recently been received that the widow, with the six children, who stood by him so faithfully during all of these years is now in desperate need of assistance. Your Society has already forwarded a sum of money for her help. If you, as a member of

this Society, are interested enough and you care to purchase some of the work of her late husband, there are some folios of ten colored portraits of his work that can be purchased for \$15.00. Your order should be addressed to Georges Reichen, Bruderweis 21, Zurich-Leimbach, Switzerland. By ordering from the above, the rate of exchange is better and Mrs. Schefer will realize more. The portfolio is well worth the price, you will be obtaining the last sample of his work and you will be helping his deserving widow.

In Memory of

JOHN C. AINSWORTH

Annual Member

**8 Queen Anne's Gardens, Bedford Park, London, W4, England,
who died on October 15, 1946.**

C. E. CAINE

Annual Member

**2039 Los Angeles Ave., Berkeley, Cal.
who died on Sept. 4, 1946.**

LOWELL GREEN

Annual Member

**Bellows Falls, Vermont
who died on July 4, 1946.**

JOHN HARPER

Annual Member

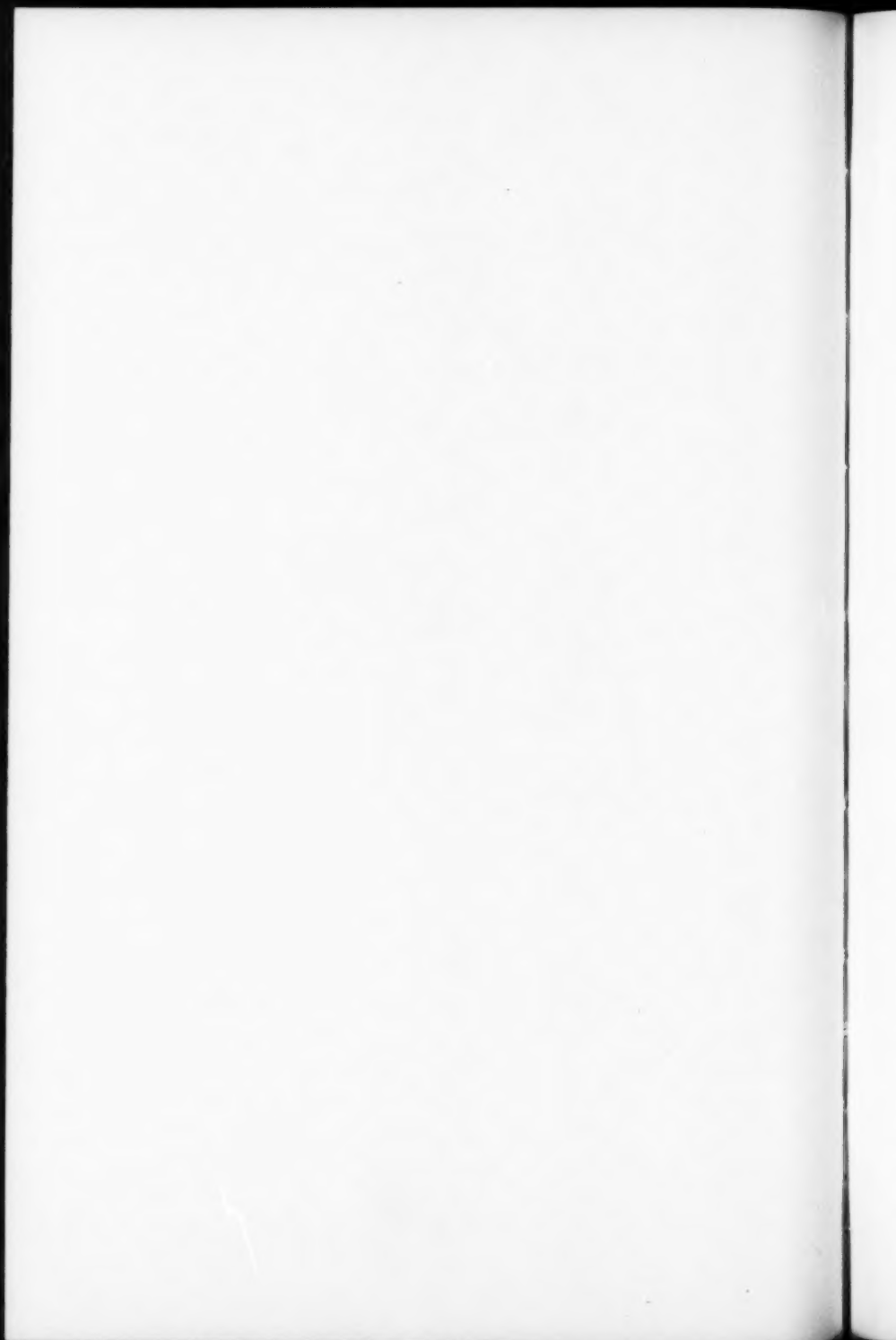
**28 Main Street, Delhi, New York
who was killed in action in 1944.**

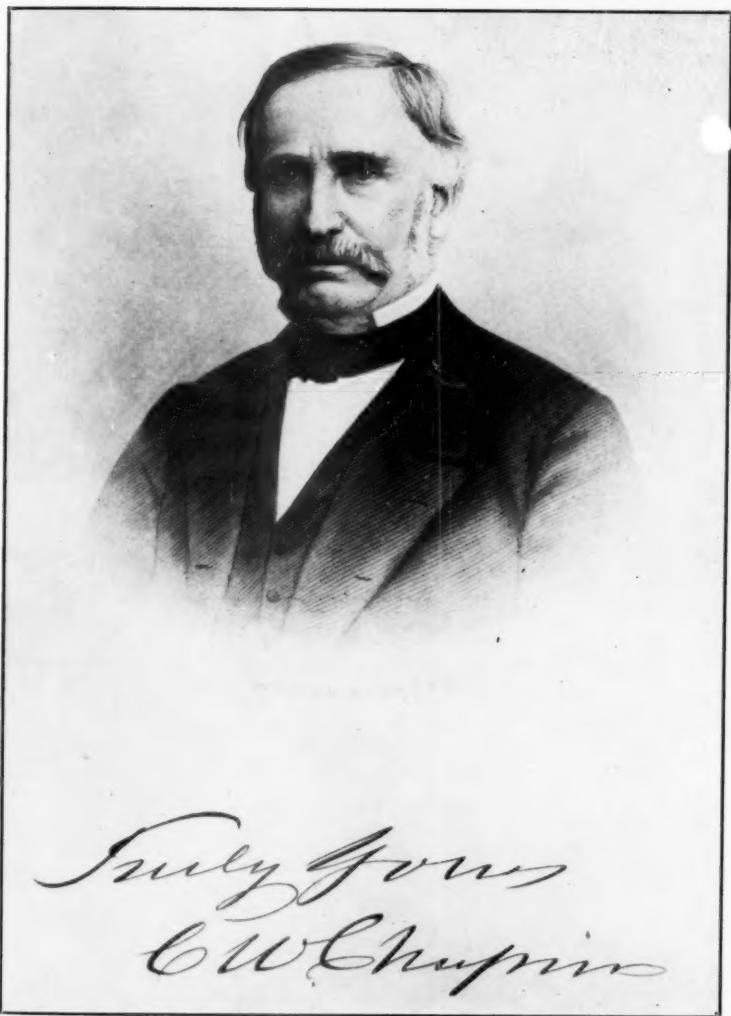
R. H. SHAPLEY

Annual Member

**178 Box Ave., Buffalo, N. Y.
who died on Oct. 16, 1946.**

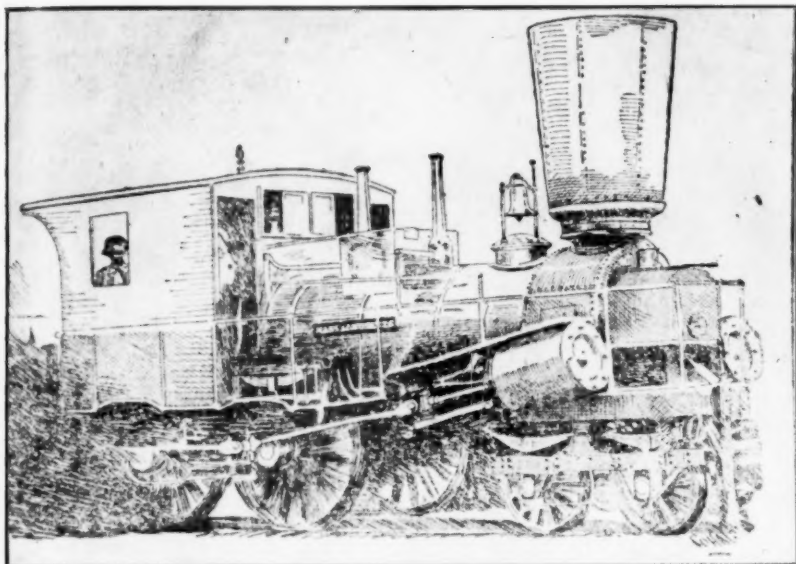






Truly yours
C. W. Chapman



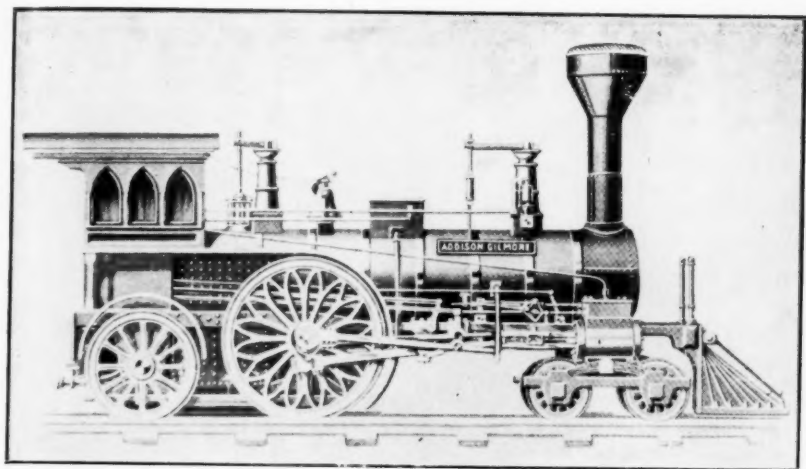


W. R. R. "Massachusetts"—L. & C. 1840.

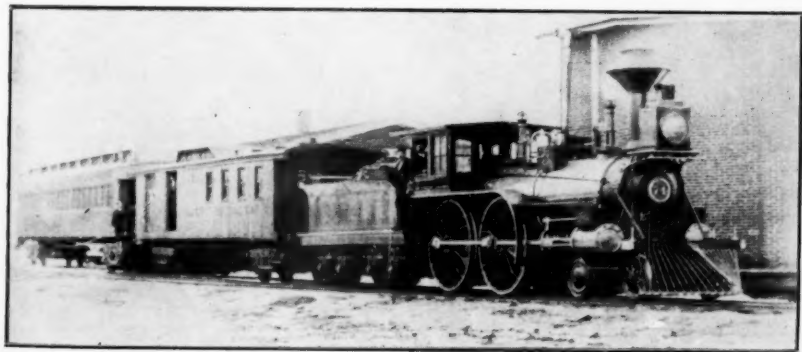


The "Bristol"—L. & C. 1841.



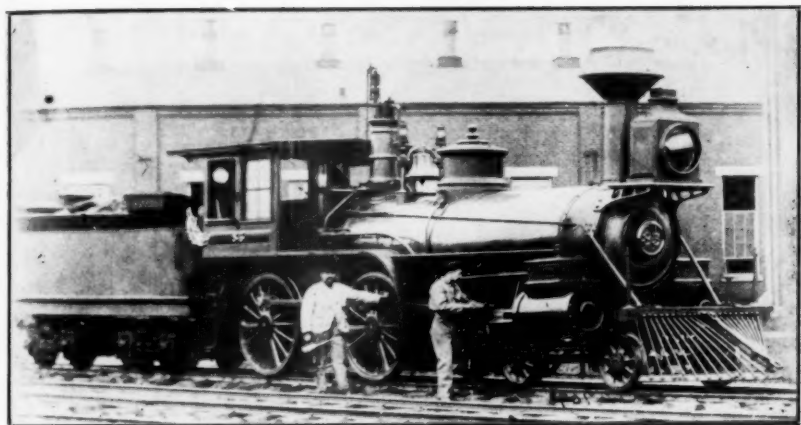


The "Addison Gilmore"—Eddy, 1851.

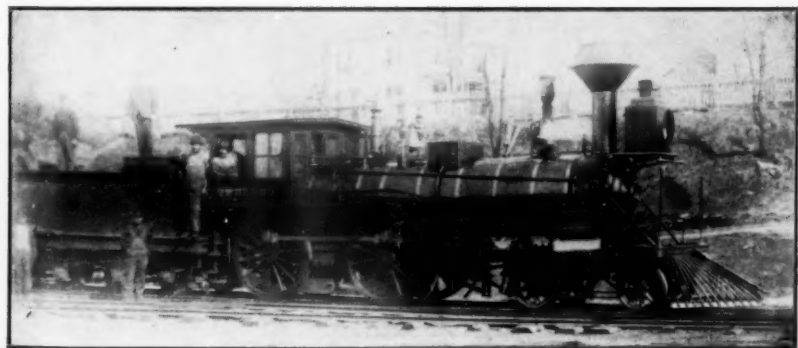


W. R. R. #74—"Springfield"—Eddy," 1864.



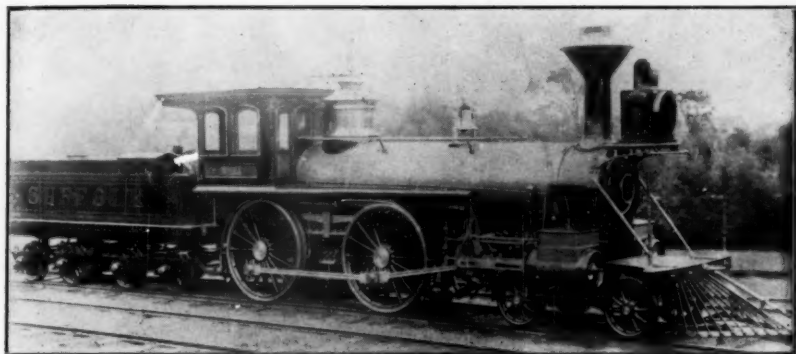


W. R. R. #83—"Arizona"—Eddy, 1866.

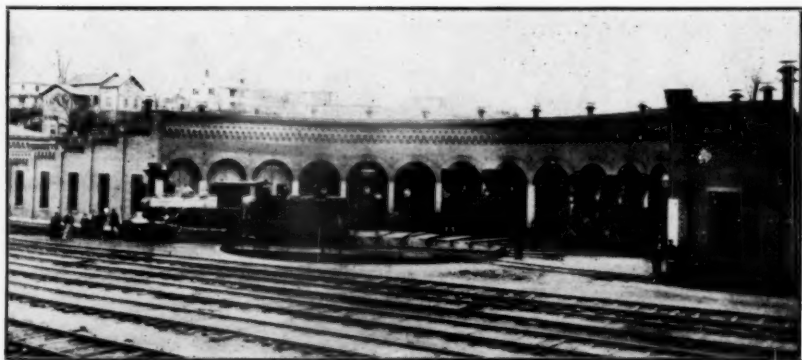


W. R. R. #97—"Indiana"—Eddy 1867.

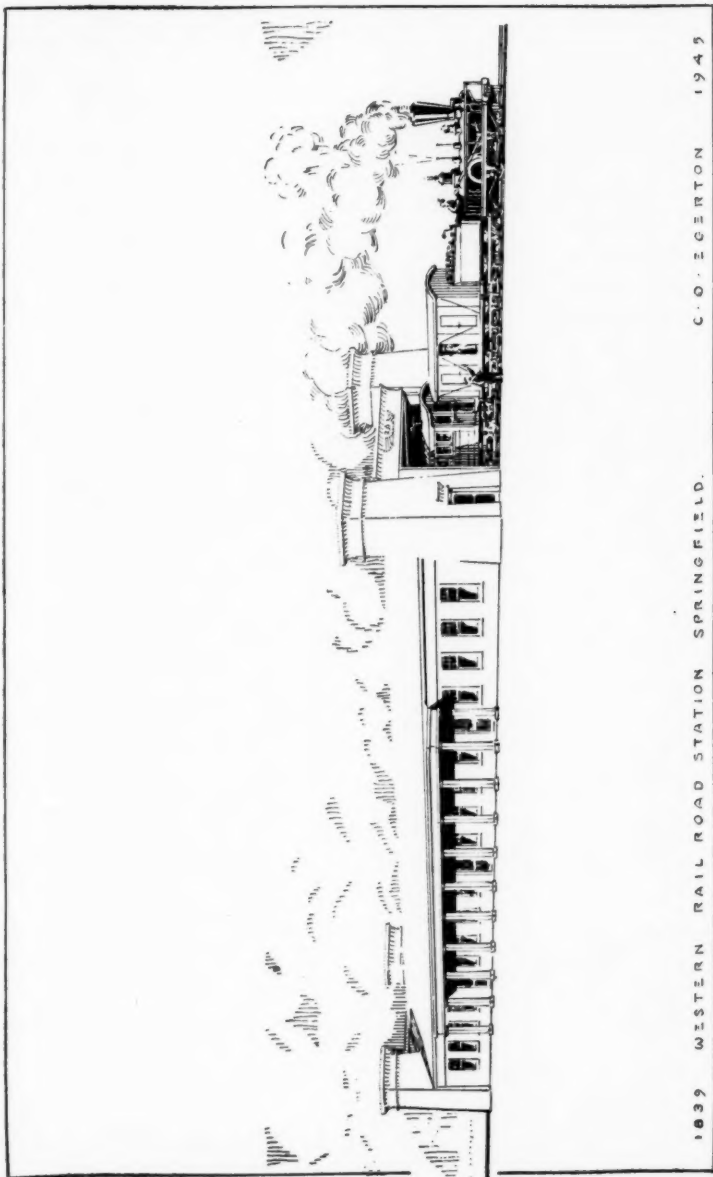




W. R. R. "Suffolk"—Grant, 1867.

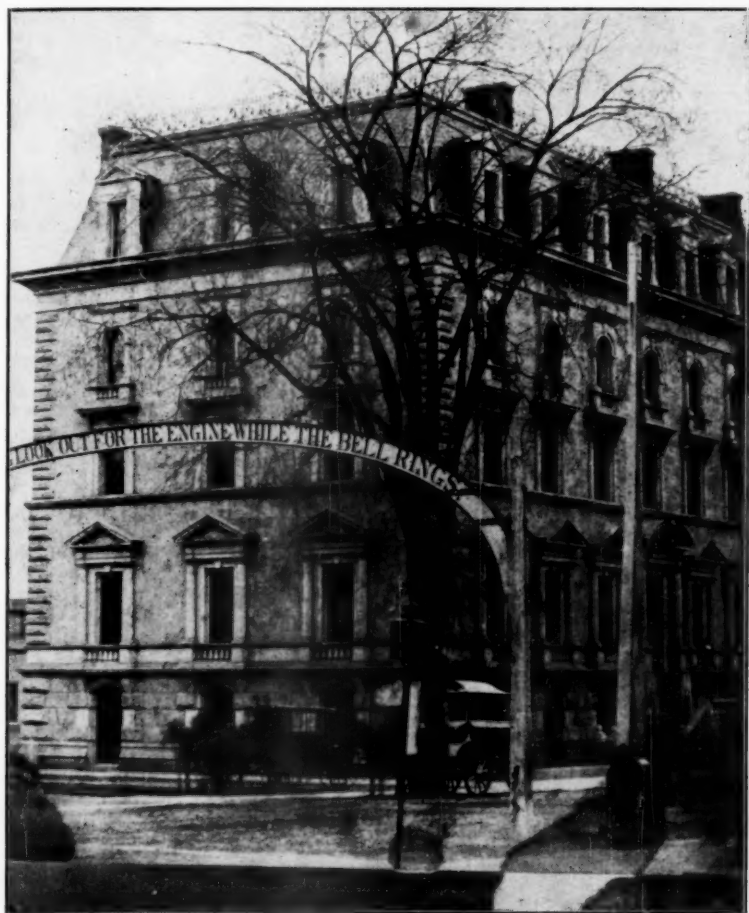


The Pittsfield Roundhouse with the "Saranak" in the foreground.

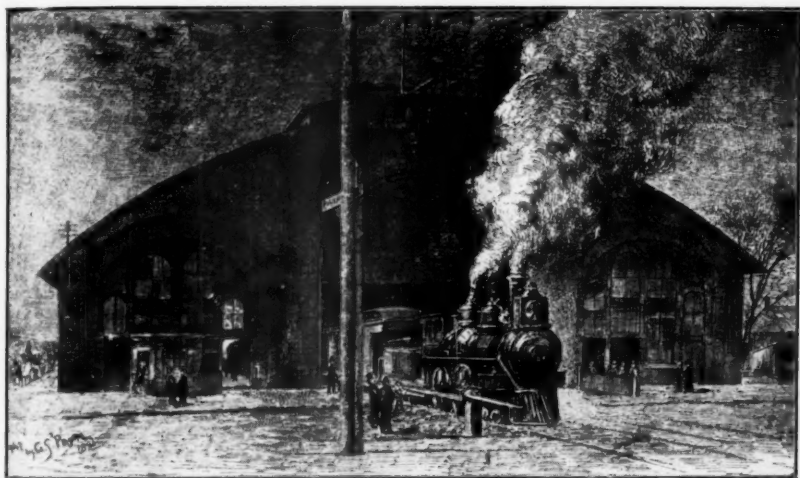


1839 WESTERN RAIL ROAD STATION SPRINGFIELD. C. O. EGERTON 1949

The first W. R. R. Station in Springfield.



The Granite Building at Springfield, headquarters of the road.

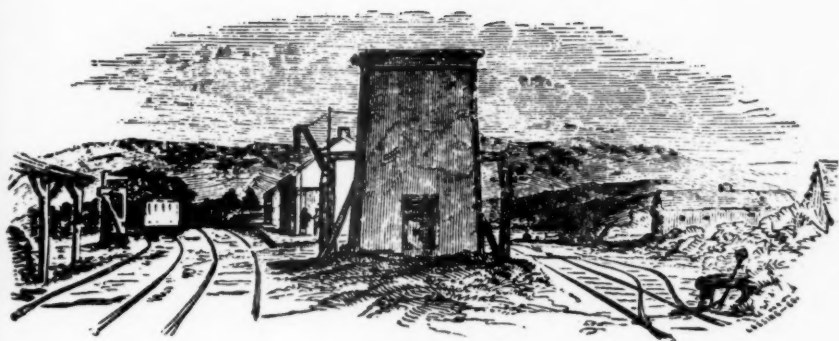


Springfield Depot as it appeared in 1891.



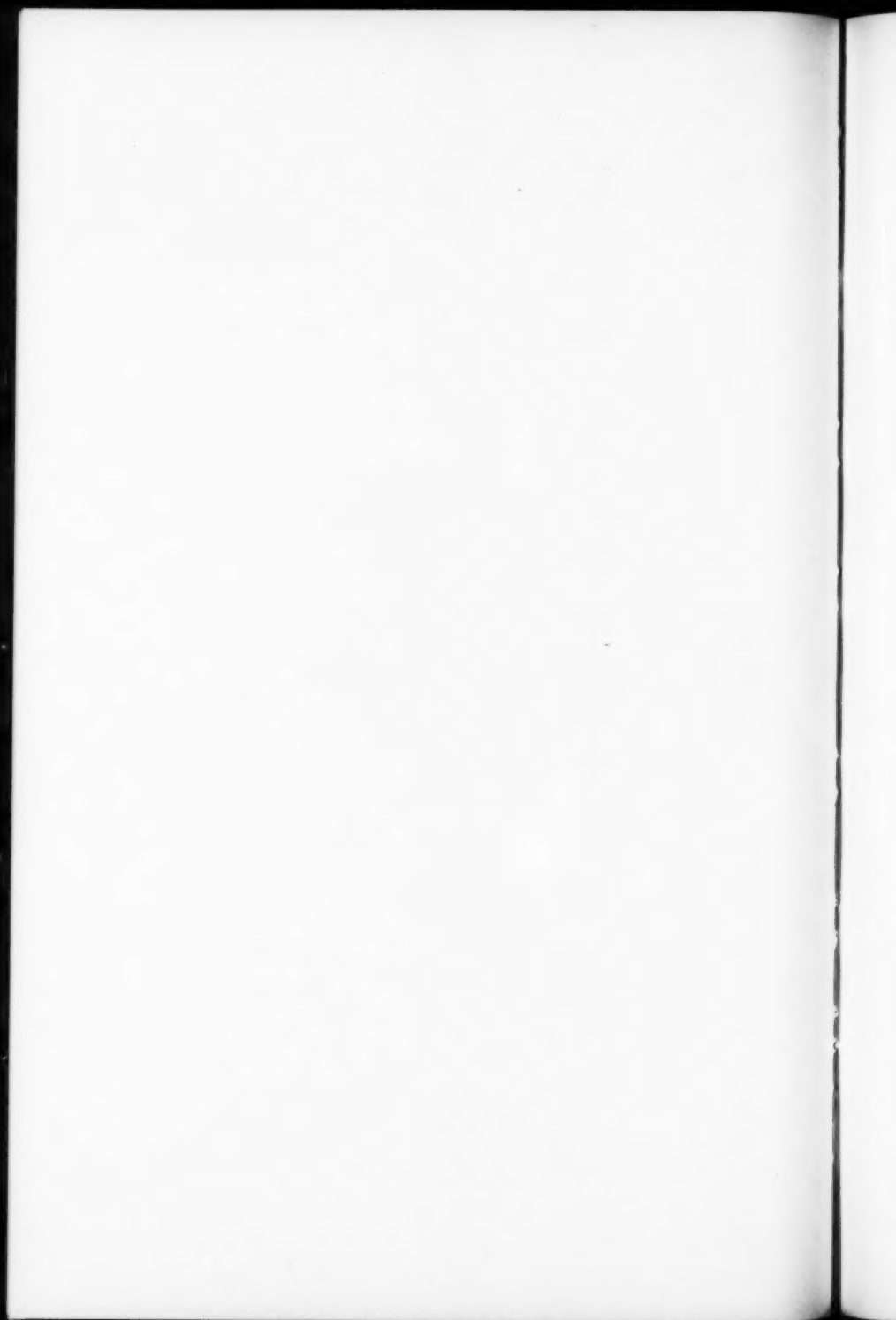
The bridge crossing the Connecticut River at Springfield.

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State Line Station.

State Line where the Western R. R. connected with the A. & W. S. and H. & B. R. Rs.



WESTERN RAIL-ROAD.



Summer Arrangement. FARE REDUCED.

PASSENGER Trains run daily, (Sundays excepted,) as follows:

Leave Springfield, 7 o'clock A. M. and arrive in Boston 12 1/2 P. M. Leave Springfield 1 1/2 P. M. and arrive in Boston 6 1/2 P. M.

Leave Boston 6 A. M. and arrive in Springfield 11 1/2 A. M. Leave Boston 3 P. M. and arrive in Springfield 7 1/2 P. M.

Passengers by the afternoon train from Springfield reach Worcester in time for the steam boat Train to Norwich and New London. The morning trains connect with stages as follows: At Palmer, to Three Rivers, Belchertown, and Amherst; At W. Brookfield, to Ware, & Enfield; & at S. Brookfield to N. Brookfield. Stages run from both trains to Monson.

FARE.—From Springfield to Worcester, \$1 50; to Boston, \$3.

MERCHANDISE Trains leave Springfield and Boston daily, Sundays excepted, running through by 4 o'clock P. M.

RATES through,—up or down,—merchandise generally, per 2000 lbs., \$4 70
 Springfield to Worcester, 3 20
 " " S. Brookfield, 2 10
 " " W. Brookfield, 2 00
 " " Warren, 1 50
 " " Palmer, 1 10
 " " Wilbraham, 90

Plaster and Lumber (not less than a car load) through, 4 00

Live Stock, (drivers free)—not less than a car load) to Brighton or Boston, per 100 lbs., 32 1/2 cts.

Cheese, at at merchandise rates, and boxes, if empty, returned free.

All articles coming from boats, through S. Hadley canal going downwards and through both roads, per 2000 lbs. 3 25

Lime, Slate, Copperas, Cider, Shooks, Staves, Ship timber, Potatoes in bags &c. Bricks, Freestone, Granite, soapstone and Marl down and through from Springfield to Boston, 3 25

Wool, per cord, between Springfield and Wilbraham 1 20

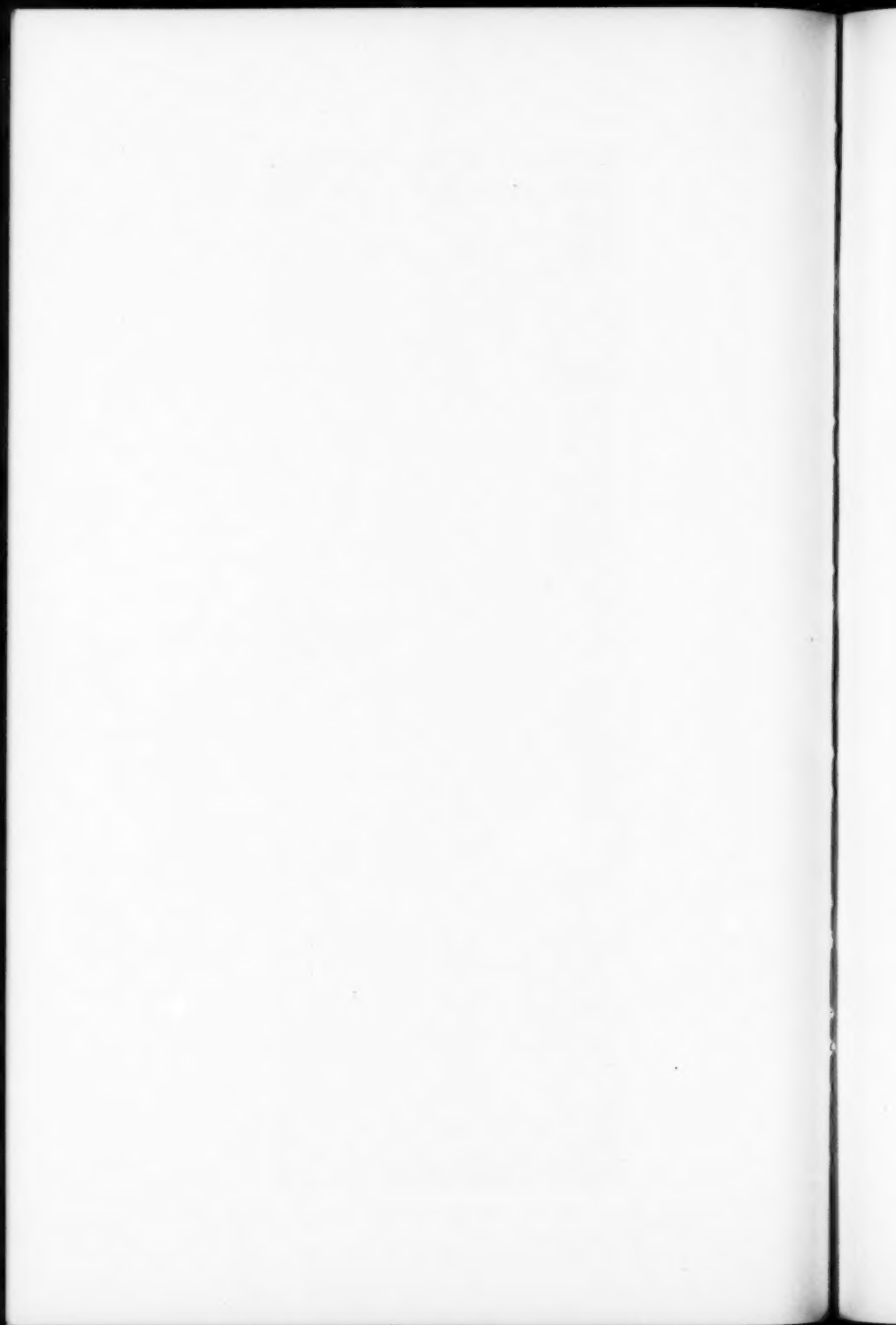
Between Springfield and Palmer, 1 50

" " " Warren, 2 40

(owners loading it.)

N. B. The steamers Portland and Bangor leave Boston for Portland, Tuesdays, Thursdays, and Saturdays 7 P. M. and for Portland and Bangor Tuesdays, 7 P. M. and Fridays, 5 P. M. Fare, Boston to Portland, \$2; do. to Bangor, \$4; Thomaston and Belfast, \$3.

GEORGE W. WHISTLER, Engineer.
 May 20, 1840. 1521



TIME TABLE. WESTERN RAIL ROAD.

Times when Trains are to leave Stations.

Western Trains.—Dec. 4, 1843.

LEAVE.	Springfield to Greenbush.			Greenbush to Springfield.			Greenbush to St. Line.	St. Line to Greenbush.
	1st Pass'r.	2d Pass'r.	Freight.	1st Pass'r.	2d Pass'r.	Freight.		
Springfield,	7.00 A.M.	12.45 M.	5.30 A.M.	12.30 M.	8.30 P.M.	4.45 P.M.		
East Springfield, . . .	7.04 -	12.49 -	5.40 -	12.35 -	8.35 -	4.35 -		
Windsor,	7.26 -	1.11 P.M.	6.20 -	12.04 -	8.04 -	3.55 -		
Barnett,	7.49 -	1.34 -	7.00 -	11.41 A.M.	7.41 -	3.10 -		
Chatter Village, . . .	8.01 -	1.46 -	7.30 -	11.29 -	7.29 -	2.51 -		
Chatter Factory, . . .	8.29 -	2.14½	8.00 -	11.09 -	7.09 -	2.14½		
Middlefield,	8.44*	2.39 -	8.44*	10.46 -	6.46 -	1.34 -		
Baker,	8.54	2.39	9.11 -	10.36 -	6.36 -	1.10 -		
Washington,	9.05	2.50 -	9.40 -	10.25 -	6.25 -	12.40 -		
Hinsdale,	9.18 -	3.03 -	10.12½ -	10.12½ -	6.12 -	12.25 -		
Dalton,	9.29 -	3.15 -	10.37 -	10.00 -	6.00 -	12.00 -		
Pittsfield,	9.40*	3.30 -	11.30**	9.45†	5.45 -	11.30**		
Shaker Village, . . .	9.57†	3.48 -	12.04 -	9.25 -	5.25 -	9.57†		
Richmond,	10.11 -	3.55 -	12.39 -	9.11 -	5.11 -	9.25 -		
State Line,	10.21 -	4.05 -	1.04 P.M.	9.00 -	5.00 -	9.10 -	7.15 A.M.	6.00 P.M.
Canaan,	10.36 -	4.21 -	1.24 -	8.45†	4.47 -	8.45†	7.00 -	6.15 -
East Chatham, . . .	10.40 -	4.34†	2.04 -	8.32 -	4.34†	8.15 -	6.47 -	6.28 -
Chatham 4 Corners, . .	11.14 -	4.59 -	2.54 -	8.15 -	4.15 -	7.40 -	6.30 -	6.48 -
Chatham Center, . .	11.31 -	5.16 -	3.24 -	7.56 -	3.58 -	7.10 -	6.11 -	7.05 -
Kinderhook,	11.41 -	5.26 -	3.48†	7.48 -	3.48†	6.55 -	6.03 -	7.15 -
Schoedack,	12.05	5.49 -	4.33 -	7.25 -	3.25 -	6.05 -	5.40 -	7.38 -
Greenbush,	12.30 M.	6.15 P.M.	5.15 P.M.	7.00 A.M.	3.00 P.M.	5.15 A.M.	5.15 A.M.	8.03 -

* 1st Pass. T. to Greenbush passes Ft. T. to Greenbush at Middlefield, at 8 44 A. M.

† 1st Pass. T. to do. passes 1st Pass. T. to Springfield at Pittsfield, at 9 45 A. M.

‡ 1st Pass. T. to do. passes Freight T. to do. at Shaker Village, at 9 57 A. M.

§ 2d Pass. T. to do. passes Freight T. to do. at C. Factory, at 2 14 P. M.

|| 2d Pass. T. to do. passes 2d Pass. T. to do. at E. Chatham, at 4 34 P. M.

** Freight T. to do. passes 1st Pass. T. to do. at Hinsdale, 10 12 A. M.

*** Freight T. to do. passes Freight T. to do. at Pittsfield, at 11 30, A. M.

†† Freight T. to do. passes 2d Pass. T. to do. at Kinderhook, at 3 48 P. M.

‡‡ 1st Pass. T. to Springfield passes Freight T. to do. at Canaan, at 5 43 A. M.

The Housatonic Train will be considered an irregular train when going from State Line to Greenbush, and of course will be considered an irregular train in going westward; but it will be considered a regular train in going from Greenbush to St. Line.

REGULATIONS.

1. No Train must under any circumstances leave a station before its time as specified in the TIME TABLE.

2. Passenger Trains will not wait for Freight Trains—but when a meeting of Passenger Trains is expected, neither Train will leave the Station until the other arrives, or is heard from.

3. Freight Trains will in all cases wait for Passenger Trains—and be kept entirely out of their way—never leaving a Station on the time of a Passenger Train unless in consequence of positive information received from it. They will also wait for other Freight Trains at Stations appointed for passing.

4. A Freight Train must not leave a Station immediately preceding a Station where a Passenger Train is expected to pass, unless it has its full running time as specified in the TIME TABLE.

5. A red Flag must always be exhibited upon an Engine when an Engine other than that of a regular Train is to follow it—and in case a regular Train is divided into two or more distinct Trains, Flags will be kept flying upon all the Engines of the Train except the last.

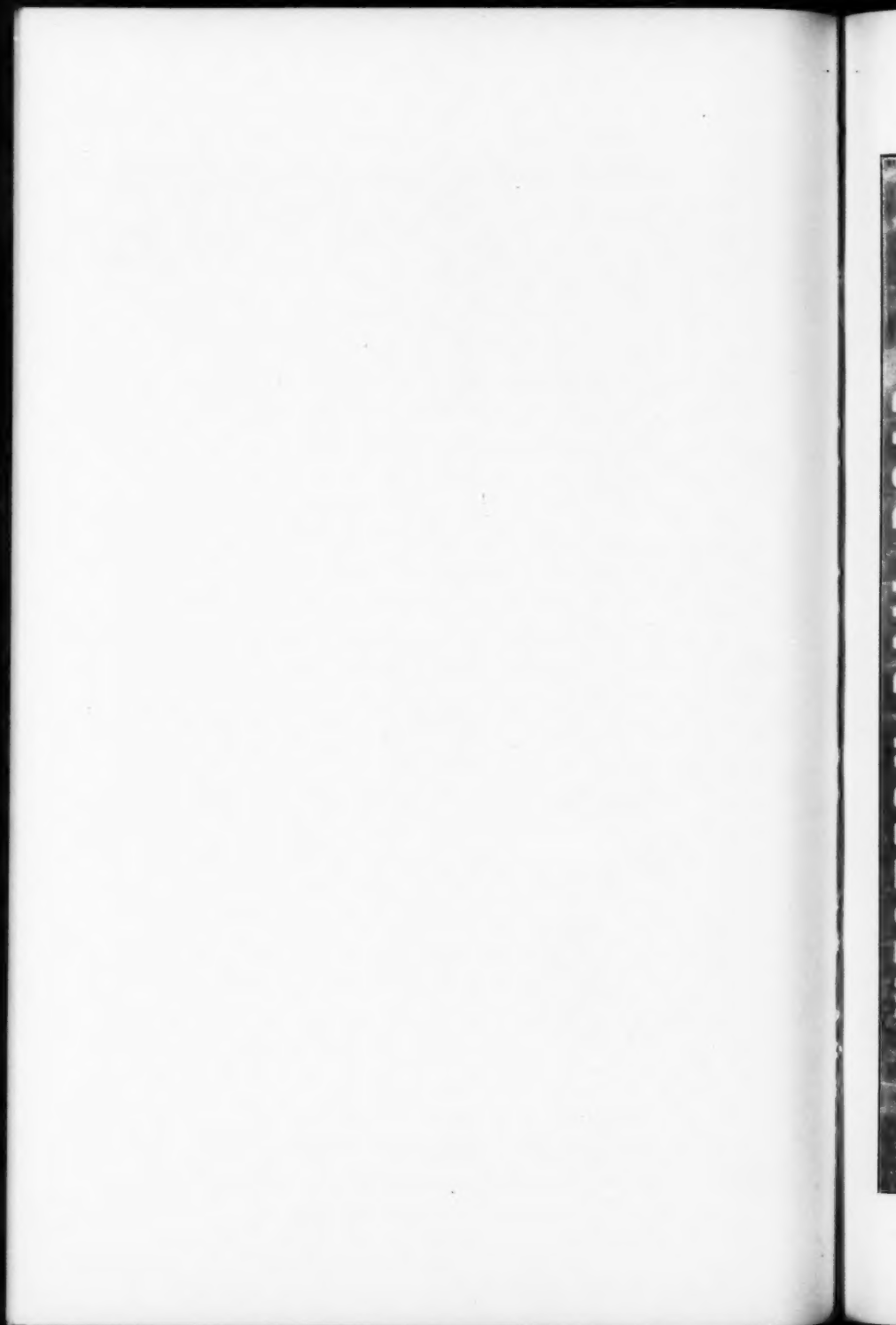
6. Lanterns must be exhibited at night at the rear of all trains and no excuse will be admitted for any neglect either in exhibiting or observing this Signal.

7. All Engines on approaching a station will sound the whistle at the posts set up as signals for that purpose—pass the switch cautiously; and in all cases stop at the Station.

8. All Engines before crossing at grade the N. & W. and the H. & B. Rail Roads, will make a full stop, and proceed only where there is seen to be no obstruction.

9. All persons whatever, employed upon the road, are required to give notice of any obstruction to the passage of the trains by exhibiting a red flag conspicuously and at a sufficient distance from the obstruction, in both directions of the road—and all Conductors, Engine-men, &c., connected with the train, are required to regard such a signal, and to proceed with *extreme caution* until the cause of the obstruction is ascertained.

10. The clock at the upper depot in Worcester shall be taken to be the standard time, and all conductors before leaving Worcester are required to compare and regulate their time by that clock, and to see that the clocks at all other stations which they pass conform to the standard time. The Trains west of Springfield will in like manner be governed by the time at the Springfield depot.



WESTERN RAIL ROAD.

The following special agreement must be made in all cases when Horses are to be transported upon the Western Rail Road. The prices to be charged under this agreement will be as follows:

1 Horse	as 1½ tons,	1st Class.
2 Horses	1½	"
"	2	"
"	2½	"
4		"

Or by weight when weighing more than this amount, at first class rates. In case it is desired that the transportation of Horses should be at the risk of the Corporation, special application must be made therefor at the office in Springfield, and the rate of charge will be varied according to the value of the Horses.

The owner or consignee will in all cases be required to load the Horses into the cars and to remove them from the cars; the agents of the Road rendering all the assistance in their power, if requested to do so.

This rule will be applicable to other live stock when an *especial value* may be placed upon it. For ordinary live stock the rule prescribed in the Tariff will be observed as heretofore.

JAMES BARNES,
Superintendent & Engineer.

W: R. R. Office, Springfield. July 20, 1846.



BOSTON and ALBANY.

Western Rail Road. --- Fare Reduced.

1846. -- SUMMER ARRANGEMENT. -- 1846.
COMMENCING MAY 18.

PASSENGER TRAINS LEAVE DAILY, SUNDAYS EXCEPTED.

Boston at 7 A. M. and 4 P. M. for Albany. Springfield 4 A. M. and 1 P. M. for Albany.
Albany at 6 A. M. and 4 P. M. for Boston. Springfield 4 A. M. and 1 P. M. for Boston.

EXPRESS TRAIN -- FARE 3 DOLLARS THROUGH.

An Express train leaves Boston and Albany every evening, Sundays excepted, stopping only at Worcester, West Brookfield, Palmer, Springfield, Chester Factory, Pittsfield and Chatham.

Leave Boston at 7:30-4 P. M. Arrive in Albany at 4 A. M.
" Albany 7 1/2 " " Boston " 4 "

BOSTON, ALBANY AND TROY.

Leave Boston at 7 A. M. arrive at Springfield at 12 M. and leave at 1 P. M. and reach Albany at 6 P. M.
Leave Boston at 4 P. M. arrive at Springfield at 9 P. M. lodge, leave next morning at 4 A. M. and arrive at Albany at 10 A. M.
Leave Albany at 6 A. M. arrive at Springfield at 12 M. lodge, leave at 1 P. M. and arrive at Boston at 5 P. M.
Leave Albany at 4 P. M. arrive at Springfield at 10 P. M. lodge, leave next morning at 4 A. M. and arrive at Boston at 9 A. M.

THE TRAINS OF THE TROY AND GREENBUSCH RAIL ROAD, CONNECT WITH ALL THE ABOVE TRAINS AT GREENBUSCH.

FARE FROM BOSTON TO ALBANY, \$1.00 -- FARE FROM SPRINGFIELD TO BOSTON OR ALBANY, \$2.75.

BOSTON & NEW YORK VIA SPRINGFIELD.

Passengers leaving Boston at 4 P. M. arrive in Springfield at 9 P. M. proceed directly to Hartford and New Haven, and thence by the Steamers to New York, arriving at 5 o'clock, A. M.

FOR BUFFALO.

The Train leaves Albany at 7 A. M. and 2 P. M. arriving in Boston at 5 A. M. and 8 P. M. next day.
Returning, arrive at Albany at 4 A. M. and 1 P. M.

NEW YORK & BOSTON, VIA ALBANY.

The Trains from Boston arrive at Albany in season for the 7 o'clock boats to New York. Returning, the boats leaving New York reach and 2 P. M. reach Albany at 5 A. M. in ample season for the morning train to Boston.

Those leaving at 7 A. M. reach Albany in season for the morning train to Springfield and the Express Train to Boston.

Steamboats also leave Albany at 7 A. M. and 5 P. M. and stop at the usual landing places upon the river.

The Trains of the Springfield, Poughkeepsie and New Haven Rail Road, connect at Springfield, and passengers from Albany or Boston, proceed directly on to Hartford and New Haven.

MONTREAL.

Passengers leaving Boston at 8 A. M. arrive at Troy at 12 A. M. leave Troy at 7 A. M. for Montreal, and thence by Canal Packets to Montreal, arriving at 11 A. M. in the Evening. Passengers of Lake Champlain, via Burlington to St. John, and thence by Rail Road and Steamer to Montreal, arriving at 11 A. M. leaving 40 hours on from Boston. The whole route is made by the Express Train to Boston. Fare through by this route to Montreal, \$1.00. Thence to Montreal, \$1.00.

The trains of the Hudson and Berkshire Rail Road connect at Chatham and State Line.

THE MONTAGNION RAIL ROAD CONNECTS AT STATE LINE.

The Trains of the Connecticut River Rail Road connect at Springfield, and passengers may proceed, without delay to Northampton, and thence by stage to Greenfield, Brattleboro, Bellows Falls, Hudson, Hartford, &c.

Stages leave West Brookfield for Ware, Enfield, New Braintree and Hardwick. Also leave Palmer for Three Rivers, Belchertown, Amherst, Ware and Moulton. Pittsfield for North and South Adams, Williamstown, Lebanon Springs, &c.

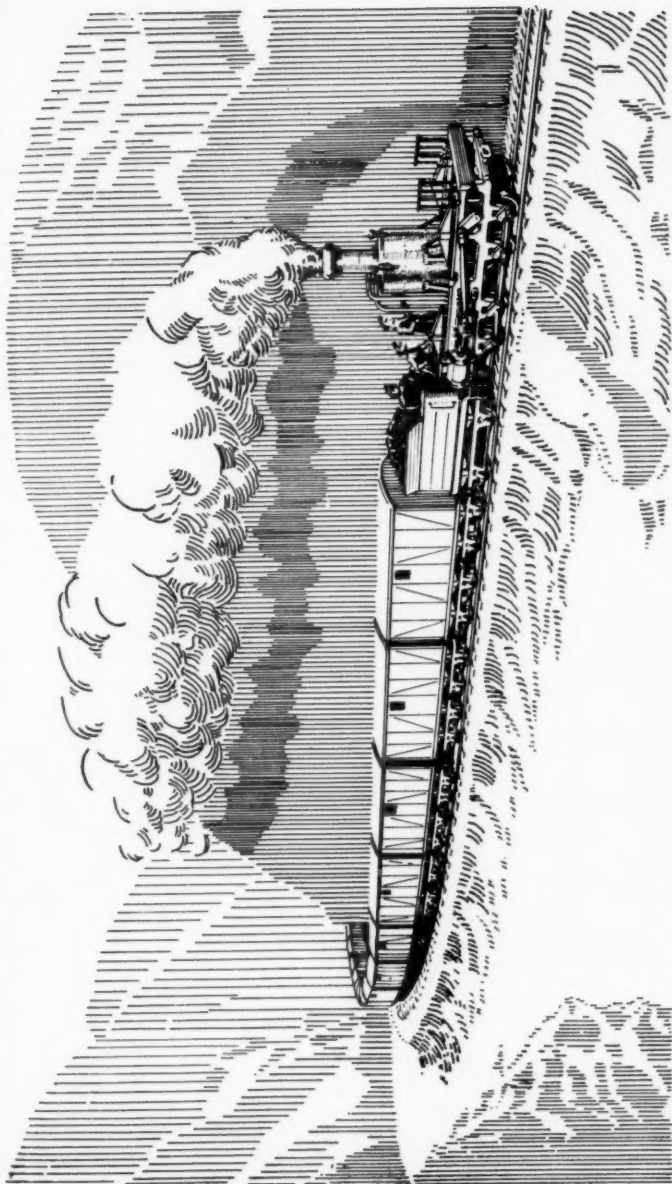
Merchandise Trains run daily (Sundays excepted) between Boston, Albany, Troy, Hudson, Northampton, Hartford, &c.

For further information apply to C. A. BEAR, Agent, 27 State St. Boston, or to S. WITTE, Agent, Albany.

JAMES BARNES,

Superintendent & Engineer.

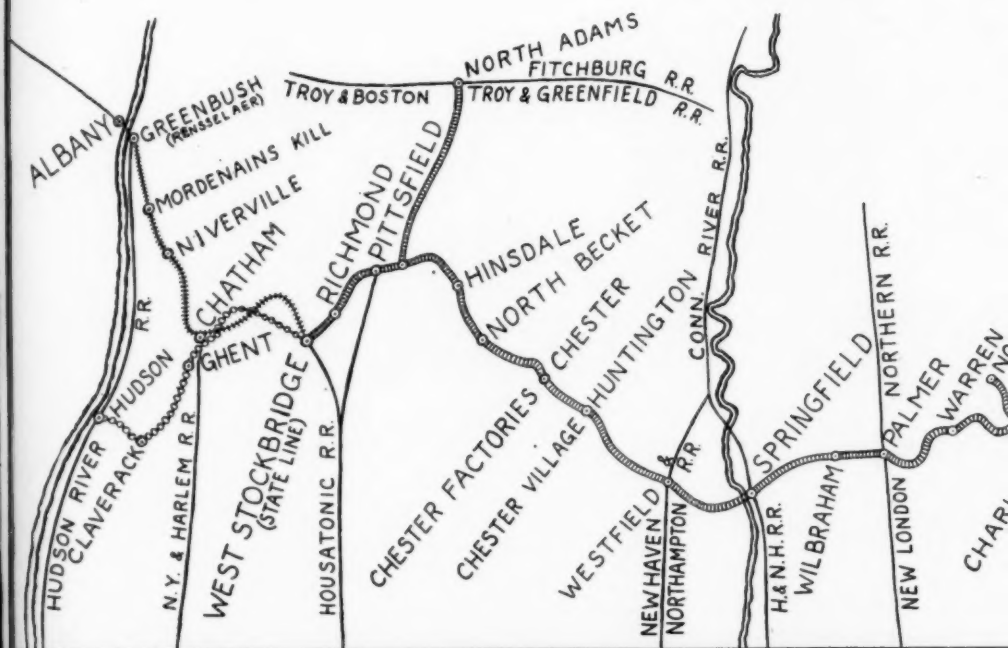
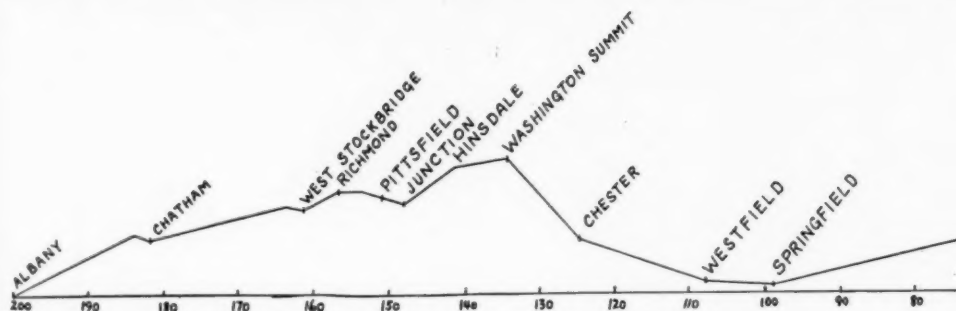
Western Rail Road Office, Springfield, May 18, 1846.



THE PACIFIC
COAST
CARRIAGE
CO.

WESTERN R. R. OF MASSACHUSETTS 1841

1. 14. 1945



WESTERN RAILROAD OF MASSACHUSETTS AND ITS CONNECTIONS

